EXCEL
Excel Industries, Inc.
P.O. Box 7000
Hesston, Kansas
67062-2097
316-327-4911

March 2, 1999

Mr. Gil Perez, CHMM
Waste Management Programs-Bureau of District Operations
Kansas Department of Health & Environment
South Central District Office
130 S. Market, 6th Floor
Wichita, KS 67202-3802

Re: Notice of Compliance/Non-Compliance, Fifth Report

Dear Mr. Perez;

	Citation	Description of Violation
6/7.	KAR 28-31-4/40CFR 265.16	Training Program - need to develope specific Hazardous Waste Management Training Module. Send copy of training program & conduct annual training

Continue

Answer: I have enclosed a copy of the Excel Incustries, Inc. Hazardous Waste Training Program however crude it is. It is not complete. I can assure you I have been working on this project full time except for times when our company has immediate needs that I must take care of.

Enclosed is the information I have (not necessary in the final order):
- Hazardous Waste Coordinators (2 pages)
- Titles of persons who will be trained in this program (21 pages)
- Hazardous Waste Training Program (22 pages)
- Hazard Communication Program (7 pages)
- Hazardous Waste Contingency Plan (13 pages)
- Evacuation Routes & Meeting Places (4 pages)
- Emergency Equipment Locations (4 pages)
- Sample Manifest Documents (4 pages)
- Weekly Inspection Sheet (3 pages)
- Site Plan (2 pages)
- Appendix A: F-List, K-List, P-List, & U-List (25 pages)
- Appendix B: Land Ban Restrictions (3 pages)
- How to Obtain A MSDS (2 pages)

Implemented when? need to be revised.

I did not make the deadline of March 1, 1999 & will need approximately 30 additional days.

8.	KAR 28-3-4/40 CFR 265.52	Contingency Plan - need to update address of E.C., need to include evacuation routes & signals. Send revised copy of Contingency Plan when completed

RCRA
551340

Answer: The Hazardous Waste Generator Contingency Plan for Excel Industries has been rewritten, dated February 23, 1999 & is included in the Hazardous Training Program above. Also included are evacuation routes for each facility. I did not make the deadline of March 1, 1999 & will need approximately 30 additional days.

I will be sending another update in approximately 30 days.

Should you have any further questions please feel free to contact me @ 316-327-1211.

Lee Peters
Facilities Manager
Excel Industries, Inc.
200 South Ridge Road
Hesston, KS 67062

HAZ MAT

COORDINATORS

OK

HAZARDOUS MATERIALS EMERGENCY COORDINATOR:

Lelyn Peters

[redacted]

Ex. 6 PII

Richard Blouin – Alternate

[redacted]

Fire extinguisher located on the north side of the paint kitchen.

Fire alarm located by the office/shop walk-in door.

For an emergency, Fire, Ambulance, or Police dial 9-1-1.

PERSONS REQUIRING TRAINING

"THOSE WHO HANDLE HAZARDOUS WASTES"

NAMES & JOB TITLES

Job Description

Excel Industries, Inc.
P.O. Box 7000
Hesston, KS 67062

Identification Facts

Job Title Facilities Manager Date 03-03-97

Department Facilities - Manufacturing

Brief General Summary of Nature or Function of Job:

Manage all aspects of the facilities, plant engineering and maintenance.

Labor Grade V EEO Code OM

Classification: Hourly _____ Non-exempt _____ Exempt X

Working Hours: Shift 4 From 7:00 a.m. To 4:00 p.m.
From _____ To _____
From _____ To _____

Overtime: Seldom X Frequent _____
Average Hours Per Week 40

Misc. _____

Qualifications

Educational Requirements: (General Education--Grade or Years)

Grammar School	High School	Technical/ Business School	College
X	X		X

Specific Education For Job Industrial Engineering degree or equivalent experience.

Job Experience

Previous Experience Required: Yes X No _____

Acceptable Type and Length Engineering - 5 years

Previous Jobs Normally Held Industrial Engineer, Plant Engineer or Mechanical Engineer

Approved by Directors of Operation Date 3-03-97

Contacts Made P ·ularly as Part of the Job·

Within the Company: All departments.

Outside the Company: Contractors, Regulators, Engineers, Vendors

Reporting Relationships

Exercises Supervision Over: Department employees

Is Supervised By:	Title	Department
Immediate Supervisor	President	Manufacturing

Major Job Duties:

Responsible for managing all aspects of the Plant Engineering, Maintenance, and Grounds Maintenance Departments. Provides support from these departments to all manufacturing areas through proper management procedures. Also provides specification, recommendation, procurement, and installation of new equipment or processes for the manufacturing departments. Responsible for efficiently managing all utilities provided by the City of Hesston and KGE. Responsible for compliance to environmental, hazardous waste, and air pollutant regulations. Responsible for writing company rules and regulations concerning health, fire and safety issues.

Policies and Regulations

General	Special and Departmental
Excel policies and	
procedures.	

Procedures and Methods

Supervisor's manual.

Technical Information

All manufacturing procedures.

Related Information

OSHA and EPA regulations.

Responsibilities

Direction & Group Leadership:

None_____ Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Department direction.

Technical Responsibility:

None_____ Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Process, specifications, safety.

Care of Equipment:

Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility All related office equipment.

Safety and Health of Others:

Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Make sure all safety rules are followed.

Contact with Public: None __ Occasional __ Frequent _X Continual __

Physical Activities

X Standing	X Talking	X Lifting	X Pushing
X Walking	X Sitting	X Carrying	X Fingering Dexterity
X Climbing	__Crawling	__Throwing	
__Balancing	X Visual Acuity	X Stooping-Low Back Bending	__Working in Congested Area
X Hearing	__Twisting Spine		X Lifting 25 Av. Wgt. 50 Mx. Wgt.
__Foot Pedal Operation	X Pulling 25 Av. Wgt.	__Working Lying Down	

X Reaching-
X Above Shoulders
X Below Shoulders

X Crouching-Knee Bending

Work Characteristics

_X_ Planning	_X_ Discrimination Colors
_X_ Writing Ability	_X_ Examining and Observing Details
_X_ Making Decisions	_X_ Attending to Many Items
_x_ Mathematic Skills	_X_ Remembering Names and Faces

Working Conditions

_X_ Inside	___ Hot	___ Dirty	_X_ Working with Others
___ Outside	___ Cold	___ Dusty	_X_ Working around Others
___ Hazardous	___ Dry	___ Odors	_X_ Working Under Pressure
___ High Places	___ Wet	_X_ Noisy	_X_ Working Alone
_X_ Change of Temperature			

Details of Working Conditions_____

_____

Details on Hazardous Work:_____

_____

Job Description

Excel Industries, Inc.
P.O. Box 7000
Hesston, KS 67062

Identification Facts

Job Title Maintenance Supervisor Date 08-03-98

Department Facilities and Maintenance

Brief General Summary of Nature or Function of Job:

Directly supervise and coordinate activities of maintenance personnel. Perform administrative duties related to department activities.

Labor Grade III EEO Code OM

Classification: Hourly _____ Non-exempt _____ Exempt X

Working Hours: Shift 1 From 7:00 a.m. To 3:30 p.m.
From _____ To _____
From _____ To _____

Overtime: Seldom _____ Occasional X Frequent _____
Average Hours Per Week 40-45

Misc. Overtime as needed to meet assignments.

Qualifications

Educational Requirements: (General Education--Grade or Years)

Grammar School	High School	Technical/ Business School	College
X	X	X	

Specific Education For Job Electrical, mechanical and supervisor training.

Job Experience

Previous Experience Required: Yes X No _____

Acceptable Type and Length Maintenance (heavy mechanical) experience, 5 years. Supervisor experience preferred.

Previous Jobs Normally Held Mechanical and/or electrical maintenance or maintenance supervisor.

Approved by Directors of Operation Date 8-03-98

Contacts Made Regularly as Part of the Job:

Within the Company: All other departments.

Outside the Company: Vendors and contractors.

Reporting Relationships

Exercises Supervision Over: Maintenance department employees.

Is Supervised By:	Title	Department
Immediate Supervisor	Facilities Manager	Facilities & Maint.

Major Job Duties:

Supervises and coordinates activities of workers engaged in maintaining and repairing physical structures and utility systems of buildings and maintaining grounds. Directs workers engaged in painting and performing structural repairs to the buildings, and maintaining and repairing building utility systems, such as electrical wiring and controls, heating and ventilation systems, and water distributing and plumbing systems. Directs workers engaged in ground maintenance activities, such as mowing lawns, trimming hedges, removing weeds, and raking and disposing of leaves and refuse. Requisitions tools, equipment, and supplies. Inspects completed work for conformance to blueprints, specifications, and standards. Analyzes and resolves work problems, or assists workers in solving work problems. Initiates plans to motivate workers to achieve work goals. Recommends or initiates personnel actions, such as promotions, transfers, discharges, disciplinary measures, and performance evaluations. Interprets company policies to workers and enforces safety regulations. Maintains and adjusts errors in time and labor records. Performs administrative duties related to department activities. May engage in the same duties as the workers being supervised. May train new workers. May confer with other supervisors to coordinate activities of individual departments.

Policies and Regulations

General	Special and Departmental
Excel policies and procedures.	EPA and OSHA training required.

Procedures and Methods

Supervisor's manual.

Technical Information

All maintenance procedures.

KRONOS and BPCS systems.

Related Information

Belong to outside professional organizations.

Responsibilities

Direction & Group Leadership:

None_____ Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Directing efforts of the maintenance department.

Technical Responsibility:

None_____ Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Machine and equipment repair.

Care of Equipment:

Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Machine and plant maintenance and repair of breakdowns.

Safety and Health of Others:

Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Eliminate hazards and design safe equipment. Make sure all safety rules are followed.

Contact with Public: None __ Occasional __ Frequent _X Continual __

Physical Activities

X Standing	X Talking	X Lifting	X Pushing
X Walking	X Sitting	X Carrying	X Fingering Dexterity
X Climbing	__Crawling	__Throwing	
__Balancing	X Visual Acuity	X Stooping-Low Back Bending	__Working in Congested Area
X Hearing	__Twisting Spine		X Lifting 25 Av. Wgt. 50 Mx. Wgt.
__Foot Pedal Operation	X Pulling 25 Av. Wgt.	__Working Lying Down	

X Reaching-
X Above Shoulders
X Below Shoulders

__Crouching-Knee Bending

Work Characteristics

_X_ Planning	_X_ Discrimination Colors
_X_ Writing Ability	_X_ Examining and Observing Details
_X_ Making Decisions	_X_ Attending to Many Items
_X_ Mathematic Skills	_X_ Remembering Names and Faces

Working Conditions

_X_ Inside	_X_ Hot	_X_ Dirty	_X_ Working with Others
_X_ Outside	_X_ Cold	_X_ Dusty	_X_ Working around Others
_X_ Hazardous	_X_ Dry	_X_ Odors	_X_ Working Under Pressure
_X_ High Places	_X_ Wet	_X_ Noisy	_X_ Working Alone
_X_ Change of Temperature			

Details of Working Conditions Work will occur in the office and production shop.

Details on Hazardous Work: Analyze electrical hazards with potential exposed circuits. Assist with disposal and clean-up of hazardous wastes. Recognize hazardous conditions, i.e. environment, exposures, chemicals, and mechanical.

Job Description

Excel Industries, Inc.
P.O. Box 7000
Hesston, KS 67062

Identification Facts

Job Title Maintenance B & A Date 06-29-98

Department Facilities & Maintenance

Brief General Summary of Nature or Function of Job:

Maintain and repair machinery and equipment in the shop.

Labor Grade IV & VII EEO Code O

Classification: Hourly X Non-exempt Exempt

Working Hours: Shift 1 From 7:00 a.m. To 3:30 p.m.
2 From 3:30 p.m. To 12:00 a.m.
From To

Overtime: Seldom Occasional X Frequent
Average Hours Per Week 40-45

Misc.

Qualifications

Educational Requirements: (General Education--Grade or Years)

Grammar School	High School	Technical/ Business School	College
X	X	X	

Specific Education For Job Mechanical maintenance

Job Experience

Previous Experience Required: Yes X No

Acceptable Type and Length 2 to 3 years experience as an industrial electrician or mechanic.

Previous Jobs Normally Held Mechanic or industrial electrician

Approved by Directors of Operation Date 6-29-98

Contacts Made Regularly as Part of the Job:

Within the Company: All departments.

Outside the Company: Vendors and suppliers

Reporting Relationships

Exercises Supervision Over: _____

Is Supervised By:	Title	Department
Immediate Supervisor	Department Supervisor	Facilities & Maint.

Major Job Duties:

Repair and maintain, in accordance with diagrams, sketches, operation manuals, and manufacturer's specifications, machinery and mechanical equipment such as engines, motors, pheumatic tools, conveyor systems, and production machines and equipment, using handtools, power tools, and precision measuring and testing instruments. Observe mechanical devices in operation and listen to their sounds to locate causes of trouble. Dismantle devices to gain access to and remove defective parts, using hoist, crane, handtools and power tools. Examine form and texture of parts to detect imperfections. Inspect used parts to determine changes in dimensional requirements, using rule, caliper, micrometer and other measuring instruments. Adjust functional parts of devices and control instruments using handtools, level, plumb bob and straightedge. Repair or replace defective structural parts in devices using handtools. Start devices to test their performance. Lubricate and clean parts. May set up and operate lathe, drill press, grinder and other metal working tools to make and repair parts.

Policies and Regulations

General	Special and Departmental
Excel policies and procedures.	Lockout/Tagout procedures.
	Fork lift operator's permit.
	Point of Operation procedures

Procedures and Me ods

Technical Information

Interpret blueprints and electrical schematics

Related Information

Mechanical aptitude

Responsibilities

Direction & Group Leadership:

None_____ Occasional __X___ Frequent_____ Continual_____

Nature of Responsibility Project management.

Technical Responsibility:

None_____ Occasional_____ Frequent_____ Continual __X___

Nature of Responsibility All phases of project.

Care of Equipment:

Occasional_____ Frequent_____ Continual __X___

Nature of Responsibility All related shop equipment.

Safety and Health of Others:

Occasional_____ Frequent_____ Continual __X___

Nature of Responsibility Report to Supervisor any unsafe conditions or practices.

Contact with Public: None __ Occasional _X Frequent __ Continual __

Physical Activities

X Standing
X Walking
X Climbing
X Balancing
X Hearing
X Foot Pedal Operation
X Reaching-
X Above Shoulders
X Below Shoulders
X Talking
X Sitting
X Crawling
X Visual Acuity
X Twisting Spine
X Pulling 100Av. Wgt.
X Lifting
X Carrying
X Throwing
X Stooping-Low Back Bending
X Working Lying Down
X Crouching-Knee Bending
X Pushing
X Fingering Dexterity
X Working in Congested Area
X Lifting 45 Av. Wgt. 100Mx. Wgt.

Work Characteristics

_X_ Planning	_X_ Discrimination Colors
_X_ Writing Ability	_X_ Examining and Observing Details
_X_ Making Decisions	_X_ Attending to Many Items
_X_ Mathematic Skills	_X_ Remembering Names and Faces

Working Conditions

_X_ Inside	_X_ Hot	_X_ Dirty	_X_ Working with Others
_X_ Outside	_X_ Cold	_X_ Dusty	_X_ Working around Others
_X_ Hazardous	_X_ Dry	_X_ Odors	_X_ Working Under Pressure
_X_ High Places	_X_ Wet	_X_ Noisy	_X_ Working Alone
_X_ Change of Temperature			

Details of Working Conditions Generally works in the production shop but some work will occur in the office.

Details on Hazardous Work: Potential exposure to electrical circuits and mechanical operations, and disposal or cleaning of hazardous waste.

Job Description

Excel Industries, Inc.
P.O. Box 7000
Hesston, KS 67062

Identification Facts

Job Title Dept. Suprv. Paint & Paint Prep. Date 08-07-98

Department Paint & Paint Prep. - Manufacturing

Brief General Summary of Nature or Function of Job:

Directly supervise and coordinate activities of production workers. Perform administrative duties related to department activities.

Labor Grade II EEO Code OM

Classification: Hourly _____ Non-exempt _____ Exempt X

Working Hours: Shift 1 From 7:00 a.m. To 3:30 p.m.
From _____ To _____
From _____ To _____

Overtime: Seldom _____ Occasional _____ Frequent X
Average Hours Per Week 45

Misc. Work overtime as required to complete assignments.

Qualifications

Educational Requirements: (General Education--Grade or Years)

Grammar School		High School		Technical/ Business School		College	
	X		X		X		

Specific Education For Job Training seminars and supervisory courses.

Job Experience

Previous Experience Required: Yes X No _____

Acceptable Type and Length 3-5 years production painting and metal finishing.

Previous Jobs Normally Held Painter, Set-Up Person, or Team Leader in the Paint Department.

Approved by Directors of Operation Date 8-07-98

Contacts Made Regularly as Part of the Job:

Within the Company: All other departments.

Outside the Company: _____

Reporting Relationships

Exercises Supervision Over: Department employees.

Is Supervised By:	Title	Department
Immediate Supervisor	Mgr. of Production	Paint & Paint Prep

Major Job Duties:

Supervises and coordinates activities of workers engaged in processing materials or manufacturing products in industrial establishment, applying knowledge of production methods, processes, machines and equipment. Interprets specifications, blueprints, and job orders to workers and assigns duties. Establishes or adjusts work procedures to meet production schedules, using knowledge of capacities of machines and equipment. Recommends measures to improve production methods, equipment performance, and quality of product, and suggests changes in working conditions and use of equipment to increase efficiency of shop, department, or work crew. Analyzes and resolves work problems, or assists workers in solving work problems. Initiates plans to motivate workers to achieve work goals. Recommends or initiates personnel actions, such as promotions, transfers, discharges, disciplinary measures, and performance evaluations. Interprets company policies to workers and enforces safety regulations. Maintains, and adjusts errors in time and labor records. Performs administrative duties related to department activities. May train new workers. May confer with other supervisors to coordinate activities of individual departments.

Policies and Regulations

General	Special and Departmental
Excel policies and procedures.	Paint and Metal Finish practices.

Procedures and Methods

Work station planning. Supervisor's manual.

Technical Information

Blueprint and processing.
KRONOS and BPCS systems.

Related Information

Paint and metal finish specifications.

Responsibilities

Direction & Group Leadership:

None_____ Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Department Supervision

Technical Responsibility:

None_____ Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Must know and understand process.

Care of Equipment:

Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility All equipment in department.

Safety and Health of Others:

Occasional_____ Frequent_____ Continual__X__

Nature of Responsibility Make sure all safety rules are followed.

Contact with Public: None __ Occasional _X Frequent __ Continual __

Physical Activities

X Standing	X Talking	X Lifting	X Pushing
X Walking	__Sitting	X Carrying	X Fingering Dexterity
__Climbing	__Crawling	__Throwing	
__Balancing	X Visual Acuity	__Stooping-Low Back Bending	__Working in Congested Area
X Hearing	__Twisting Spine		X Lifting 25 Av. Wgt. 50 Mx. Wgt.
__Foot Pedal Operation	X Pulling 25 Av. Wgt.	__Working Lying Down	
__Reaching- __ Above Shoulders __ Below Shoulders		__Crouching-Knee Bending	

Work Characteristics

_X_ Planning	_X_ Discrimination Colors
_X_ Writing Ability	_X_ Examining and Observing Details
_X_ Making Decisions	_X_ Attending to Many Items
_X_ Mathematic Skills	_X_ Remembering Names and Faces

Working Conditions

_X_ Inside	_X_ Hot	_X_ Dirty	_X_ Working with Others
___ Outside	_X_ Cold	___ Dusty	_X_ Working around Others
___ Hazardous	_X_ Dry	___ Odors	_X_ Working Under Pressure
___ High Places	___ Wet	_X_ Noisy	_X_ Working Alone
_X_ Change of Temperature			

Details of Working Conditions Normal manufacturing shop conditions.

Details on Hazardous Work: _____

Job Description

Excel Industries, Inc.
P.O. Box 7000
Hesston, KS 67062

Identification Facts

Job Title Painter B & A Date 8-05-98

Department Paint & Paint Preparation

Brief General Summary of Nature or Function of Job:

Apply a quality paint job on parts with electrostatic paint spraying equipment. Load and unload parts on paint line and prepare parts for painting.

Labor Grade III & IV EEO Code O

Classification: Hourly X Non-exempt Exempt

Working Hours: Shift 1 From 7:00 a.m. To 3:30 p.m.
From To
From To

Overtime: Seldom X Occasional Frequent
Average Hours Per Week 40

Misc.

Qualifications

Educational Requirements: (General Education--Grade or Years)

Grammar School	High School	Technical/ Business School	College
X	X		

Specific Education For Job Fundamentals of spray painting.

Job Experience

Previous Experience Required: Yes X No

Acceptable Type and Length 1-2 years experience with operating spray equipment.

Previous Jobs Normally Held Painter in an auto body shop or in a manufacturing facility.

Approved by Directors of Operation Date 8-05-98

Contacts Made Regularly as Part of the Job:

Within the Company: _____

Outside the Company: _____

Reporting Relationships

Exercises Supervision Over: _____

Is Supervised By:	Title	Department
Immediate Supervisor	Department Supervisor	Paint & Paint Prep.

Major Job Duties:

Wearing full paint hood or full respirator, operate electrostatic painting equipment to spray negatively charged paint particles onto positively charged workpieces. Move switches and dials to start current flow and to activate conveyor and paint spraying equipment. Inspect painted units for runs, sags and unpainted areas. Readjust pressure valves to control direction and pattern of spray and to correct flaws in coating. Clean paint from ceiling and walls of booth, conveyor hooks or grid, spray heads, and hoses, using solvent and brush. Maintain clean paint booth and sweep up overspray.

Identify and record through CRT, parts loaded and unloaded on the paint line. Load and move materials to work area, using handtruck or dolly. Apply masking to articles. Replace filters in paint booths. Clean and prepare surface of articles to be painted, using solvent, sandpaper, wire brush and scraper. Rack workpices, inspect, mark and prepare finished product for next department.

Policies and Regulations

General	Special and Departmental
Excel policies and procedures.	Mechanical ability and color perception.

Procedures and Methods

Technical Information

Paint & color specifications, recognition or parts.

Related Information

Responsibilities

Direction & Group Leadership:

None X Occasional Frequent Continual

Nature of Responsibility

Technical Responsibility:

None Occasional Frequent X Continual

Nature of Responsibility Must know types of paint and effects of heat on paint and chemicals in 3-stage washer.

Care of Equipment:

Occasional Frequent Continual X

Nature of Responsibility Keep equipment in good working order.

Safety and Health of Others:

Occasional Frequent Continual X

Nature of Responsibility Report to Supervisor any unsafe conditions and practices.

Contact with Public: None X Occasional Frequent Continual

Physical Activities

X Standing	X Talking	X Lifting	X Pushing
X Walking	X Sitting	X Carrying	X Fingering Dexterity
X Climbing	Crawling	Throwing	X Working in Congested Area
X Balancing	X Visual Acuity	X Stooping-Low Back Bending	X Lifting 35 Av. Wgt. 70 Mx. Wgt.
X Hearing	X Twisting Spine	Working Lying Down	
Foot Pedal Operation	X Pulling 35 Av. Wgt.		
X Reaching- X Above Shoulders X Below Shoulders		X Crouching-Knee Bending	

Work Characteristics

_X_ Planning	_X_ Discrimination Colors
_X_ Writing Ability	_X_ Examining and Observing Details
_X_ Making Decisions	_X_ Attending to Many Items
_X_ Mathematic Skills	_X_ Remembering Names and Faces

Working Conditions

_X_ Inside	_X_ Hot	_X_ Dirty	_X_ Working with Others
___ Outside	_X_ Cold	_X_ Dusty	_X_ Working around Others
_X_ Hazardous	_X_ Dry	_X_ Odors	_X_ Working Under Pressure
_X_ High Places	_X_ Wet	_X_ Noisy	_X_ Working Alone

_X_ Change of Temperature

Details of Working Conditions Work will occur in the production shop.

Details on Hazardous Work: Respiratory protection, climing on ladders, working with hazardous materials.

HAZARDOUS MATERIAL TRAINING

OK

INTRODUCTION
PURPOSE, ETC.

EXCEL INDUSTRIES, INC.
HAZARDOUS MATERIAL TRAINING
Per KAR 28-31-4/40 CFR 265.16

February 25, 1999

I. Background

The first effort to regulate hazardous waste management on a national level occurred in 1976 with the passage by Congress of the Resource Conservation and Recovery Act (RCRA). The primary goal of the act was to encourage the conservation of natural resources through resource recovery. RCRA also provided the statutory basis for the federal hazardous waste regulations. A key section of the Act provided for states to operate the hazardous waste management program in lieu of the Environmental Protection Agency (EPA).

The Kansas Department of health and Environment (KDHE) obtained authorization to administer the hazardous waste management program from the EPA in October 1985. Hazardous waste generators can thus deal exclusively with KDHE. With a few exceptions, KDHE has adopted the federal regulations by reference. In areas where the Kansas regulations have more stringent requirements than the federal program, the generator must comply with the state requirement.

II. Purpose

The purpose of this program is to comply with state & federal requirements for Hazardous Materials Training for the employees of Excel Industries Per KAR 28-31-4/40 CFR 265.16. By reviewing this program, a person should be able to:

- Determine whether a facility generates hazardous wastes;
- Determine if those wastes are regulated under the Kansas hazardous waste management program;
- Learn what a facility must do to comply with the Kansas hazardous waste management statutes and regulations;
- Learn what alternative hazardous waste management options are available to a hazardous waste generator; and
- Learn what resources are available to the industry to assist in complying with the statutes and regulations.

The hazardous waste statutes place the primary responsibility for ensuring that hazardous wastes are properly managed on the person who generates those wastes. The generator must identify all hazardous wastes and be certain that they are transported and disposed in accordance with the law. While the generator can contract with hazardous waste contractors or consultants to perform these activities

on his behalf, the ultimate responsibility for complying with the laws remains with the generator of the waste. For this reason, it is important for all generators of hazardous or potentially hazardous wastes to become familiar with the statutes and regulations that apply to them.

III. Scope

The scope of this program is to use the materials in this program to train the employees of Excel Industries in handling Hazardous Materials. To give the employees of Excel Industries a study guide to further enhance their job responsibilities & to use this program as a guide which can be reference at a future date.

IV. Who Generates Hazardous Waste?

Hazardous wastes are generated from many different chemical products and by many different types of businesses and activities. Large generators tend to be manufactures of various products while small generators are most often in the service industries. The following might be a partial list of potential hazardous waste generators:

- Chemical Manufacturing
- Metal Fabrication
- Fiberglass Fabrication
- Chemical Formulation
- Wood Products Manufacturing
- Textile Manufacturing
- Sandblasting Operations
- Pesticide Applicators
- Laboratories
- Vehicle Repair & Maintenance
- Furniture Refinishing
- Dry Cleaning

V. What is a Hazardous Waste?

The first step in determining whether an industry generates hazardous wastes is to evaluate each waste generated. They can also be compared to a "list of exempted

wastes", a "list of hazardous wastes" & by the four hazardous waste characteristics. Developing an inventory of all wastes generated at a facility is an important part of the process. In some cases product material safety data sheets (MSDS) can provide useful information. For some wastes, laboratory analyses must be conducted on a representative sample of the waste. These analyses must be conducted on a representative sample of the waste by a laboratory certified by KDHE.

It is important to remember that some listed wastes, see list below, may still pose environmental problems if they are not properly managed. Many of these wastes are therefore subject to state and federal water pollution, solid waste, or radiation control regulations.

- Domestic sewage.
- Point source industrial wastewater discharge subjects to KDHE permitting.
- Discarded wood & wood products.

A. Listed Hazardous Wastes (40 CFR 261, Subpart D)

There are four lists of specific chemicals and industrial processes that define hazardous wastes. There are the F-list, K-list, P-list, & U-list. These wastes have been listed because they either exhibit one of the four characteristics described below or they contain any number of toxic constituents that have been shown to be harmful to human health or the environment.

F-list

The F-list contains hazardous wastes from non-specific sources; that is, the waste may have been generated by various industrial processes. The list contains solvents commonly used in degreasing, metal treatment baths and sludges, wastewaters from, metal plating operations and dioxin containing chemicals or their precursors. Examples of solvents that are F-listed hazardous wastes, along with their code number are: benzene (F005), carbon tetrachloride (F001), cresylic acid (F004), methyl ethyl ketone (F005), methylene chloride (F001), 1,1,1, trichloroethane (F001), toluene (F005), & trichloroethylene (F001). Solvent mixtures or blends which contain greater than ten percent of one or more of the solvents listed in F001, F002, F003, F004 and F005 are also considered F-listed wastes.

K-list

The K-list contains hazardous wastes generated by specific industrial processes. Examples of industries which generate K-listed wastes include: wood preservation, pigment production, chemical production, petroleum refining, iron and steel production, explosives manufacturing and pesticides production.

P and U Lists

The P and U lists contain discarded commercial products, off-specification chemicals, container residues and residues from spillage of materials. These two lists include commercially pure grades of the chemical, any technical grades of the chemical and are produced or marketed, and all formulations in which the chemical is the sole active ingredient. An example of a P or U listed hazardous waste would be a pesticide on one of the two lists, which was not used during its shelf life and must now be disposed. At the time a material was intended for disposal, it would be considered a hazardous waste. The primary distinction between the two lists is the quantity at which the chemical is regulated. The P-list consists of acutely toxic wastes that are regulated when the quantity generated per month, or accumulated at any time, exceeds one kilogram (2.2 pounds). U-listed hazardous wastes are regulated when the quantity generated per month exceeds 25 kilograms (55 pounds). Examples of businesses that typically generate P or U listed wastes include pesticide applicators, laboratories and chemical formulators.

B. Characteristic Hazardous Wastes (40 CFR 261, Subpart C)

If the wastes generated at a facility are not contained on the F, K, P, or U lists the final step to determine whether a waste is hazardous is to evaluate the waste against four hazardous characteristics. These characteristics are ignitability, corrosivity, reactivity, and toxicity.

Ignitability (EPA Waste Identification Number D001)

A waste is an ignitable hazardous waste if it has a flash point of less than 140 degrees Fahrenheit as determined by the Pensky-Martens closed cup flash point test; readily causes fires and burns so vigorously as to create a hazard; or is an ignitable compressed gas or an oxidizer as defined by the U.S. Department of Transportation (DOT) regulations. A simple method of determining the flash point of a waste is to review the material safety data sheet, which can be obtained from the manufacturer or distributor of the material. Examples of ignitable hazardous wastes include naphtha, lacquer thinner, epoxy resins, adhesives, and oil-based paints.

Corrosivity (EPA Waste Identification Number D002)

A liquid waste which has a pH of less than or equal to 2 or greater or equal to 12.5 is considered to be a corrosive hazardous waste. Sodium Hydroxide, a caustic solution with a high pH, is often used by Kansas industries to clean or degrease metal parts. Hydrochloric acid, a solution with a low pH, is used by many industries to clean metal parts prior to painting. When these caustic or acid solutions become contaminated and must be disposed, the waste would be a corrosive hazardous waste.

Reactivity (EPA Waste Identification Number D003)

A material is considered to be a reactive hazardous waste if it is normally unstable, reacts violently with water, generates toxic gases when exposed to water or corrosive materials, or if it is capable of detonation or explosion when exposed to heat or a flame. Materials which are defined as forbidden explosives or Class A or B explosives by the U.S. Department of Transportation are also considered reactive hazardous waste. Few Kansas industries generate reactive characteristic wastes. Examples of reactive wastes would be waste gun powder, sodium metal or wastes containing cyanides or sulfides.

Toxicity

The fourth characteristic which would make a waste a hazardous waste is toxicity. To determine if a waste is a toxic hazardous waste, a representative sample of the material must be subjected to a test conducted in a certified laboratory. The test procedure used from the inception of the hazardous waste management program was the EP-Toxicity test. On March 29, 1990 EPA published a rule expanding the toxicity characteristic to include an additional 25 compounds and changing the test procedure. The new test procedure is the Toxicity Characteristic Leaching Procedure (TCLP). Under Federal rules, all generators are required to use the TCLP test when evaluating wastes after March 29, 1991.

The TCLP is more aggressive than was the formerly used EP-Toxicity test for certain chemicals. Many industrial wastes which previously were not hazardous wastes may be considered hazardous wastes when tested using the new procedure.

C. Other Wastes

Lead-Acid Batteries (40 CFR 266)

Used lead-acid batteries are regulated as hazardous wastes only if they are NOT recycled. Batteries that are recycled do not need to be counted in determining the quantity of hazardous waste generated per month, nor do they require a hazardous waste manifest when shipped off premises.

Asbestos (40 CFR 763)

Asbestos is not a hazardous waste and is not subject to the hazardous waste regulations. Asbestos may be disposed at sanitary landfills in Kansas provided written disposal authorization is first obtained from the Solid Waste Section of the KDHE.

Household Hazardous Waste

Household hazardous wastes (HHW) represent a wide variety of wastes which are produced as a result of normal household activities. Among the most common of these wastes are:

- pesticides
- paints and varnishes
- motor oil
- antifreeze and other automobile fluids
- household cleaners, polishes, and waxes
- wood preservatives
- photo and hobby chemicals
- swimming pool chemicals
- batteries

Although HHW is exempt from regulation as hazardous waste, many environmentally conscious citizens want a safe and convenient alternative to disposal with ordinary trash.

Used Oil (40 CFR 279)

Used oil that is recycled for energy or material recovery is not subject to the hazardous waste regulations. Used oil that is recycled by burning in a space heater or by a used oil collector does not need to be counted in determining the quantity of waste generated per month, nor does it require a hazardous waste manifest when shipped off premise. Used oil can be burned in oil fired space heaters provided that:

- The heater burns only used oil that the owner or operator generates or used oil received from do-it-yourself oil changers who generate used oil as household waste;
- The heater is designed to have a maximum capacity of not more than 0.5 million BTU per hour; and
- The combustion gases from the heater are vented to the outside air.

If used oil is burned in an industrial boiler or furnace or if you sell oil to someone who is burning it you are required to notify KDHE.

Used oil that is mixed with hazardous waste must be managed as hazardous waste. Used oil cannot be discharged onto the ground, waterways or used as a sealant, coating or a dust control agent for roads or parking lots.

Polychlorinated Biphenyls (PCBs) (40 CFR 761)

Polychlorinated Biphenyls (PCBs) are not a hazardous waste and are not subject to hazardous waste regulations. The use, storage and disposal of PCBs are regulated under the federal Toxic Substances Control Act (TSCA).

Mixed Waste

Mixed waste is waste which contains a radioactive component subject to the Atomic Energy Act (AEA), and a hazardous component which is either a listed hazardous waste or is a characteristic hazardous waste. The hazardous waste component is regulated by KDHE. Any waste which contains a radioactive component subject to the Atomic Energy Act, and a hazardous component subject to regulation is considered a mixed waste, regardless of the classification of its radioactive component as high-level, low-level, transuranic, or other.

Medical Facility Waste

Medical facilities may generate three types of special wastes: infectious, radiological, and chemical. Infectious wastes are not regulated as hazardous wastes, but are regulated as a solid waste in Kansas. Guidelines for managing such wastes can be obtained from the Solid Waste Management Section of the Bureau of Waste Management. Radiological wastes, which are not mixed wastes, are regulated by the Bureau of Air and Radiation. Medical facilities which generate listed or characteristic chemical wastes must comply with the same requirements as other generators of hazardous wastes.

Empty Containers (40 CFR 261.7)

Containers or container liners which have held hazardous materials are not regulated as hazardous wastes if all removable wastes have been emptied. For a container to be considered empty, one of the following conditions must be met.

- No more than one inch of residue remains on the bottom.
- No more than 3.0 percent by weight of the contents remain inside the container (110 gallon container or less).
- No more than 1.3 percent by weight of the contents remain inside the container (containers larger than 110 gallons).

Empty containers which contain P-listed wastes must be triple-rinsed using an appropriate solvent before they are considered empty.

VI. What Quantities of Hazardous Waste Are Regulated?

After a generator determines which wastes are hazardous waste the next step is to determine the generation rate and maximum quantities which are accumulated. The generation rate is determined by adding together the total quantity of hazardous waste from all sources each calendar month. In determining the generation rate the actual amount of waste generated each calendar month is used, not an average over a number of months.

In determining the quantity of hazardous waste generated each calendar month, a generator need not include the following:

- Hazardous waste when it is removed from on-site storage; or

- Hazardous waste produced by on-site treatment including reclamation of hazardous waste, so long as the hazardous waste that is treated or reclaimed is counted each time prior to treatment or reclamation. An example is the on-site distillation of solvents. The generation must count the amount of contaminated solvent put into the distillation unit, not the still bottom sludge that is produced.

Kansas regulations define three categories of hazardous waste generators which are described in detail below. A generator must determine which category his facility is classified as in order to determine which regulations must be followed. It should be noted that a facility may change status from one category to another depending upon generation rates and accumulation quantities.

A. Small Quantity Generator

A small quantity generator is a facility which meets all of the following conditions:

- The facility generates no more than 25 kg (55 lbs) of hazardous waste, or no more than 1 kg (2.2 lbs) of acutely hazardous waste in a calendar month; and

- The facility accumulates no more than 1,000 kg (2,200 lbs) of hazardous waste, or no more than 1 kg (2.2 lbs) of acutely hazardous waste, or no more than 25 kg (55 lbs) of debris and contaminated materials from the clean up of spillage of acutely hazardous waste.

B. Kansas Generator

A Kansas generator is a facility which meets all the following conditions:

The facility generates 25 kg (55 lbs.) or more of hazardous waste and less than 1,000 kg (2,200 lbs.) in a calendar month; and

- The facility does not generate 1 kg (2.2 lbs.) or more of acutely hazardous (P-listed) waste or 25 kg (55 lbs.) or more of debris and contaminated materials from the clean up of spillage of acutely hazardous waste; and

- The facility accumulates no more than 1,000 kg (2,200 lbs.) of hazardous waste or 1 kg (2.2 lbs.) of acutely hazardous waste, and no more than 25 kg (55 lbs.) of debris and contaminated materials from the clean up of spillage of acutely hazardous waste.

D. EPA Generator

An EPA generator is a facility which meets any of the following conditions:

- The facility generates in any single month or accumulates at any time 1,000 kg (2,200 lbs.) or more of hazardous waste; or
- The facility generates in any single month or accumulates at any time 1 kg (2.2 lbs.) of acutely hazardous (P-listed) waste; or
- The facility generates or accumulates at any time more than 25 kg (55 lbs.) of debris and contaminated materials from the clean up of spillage of acutely-hazardous waste.

VII. What Regulations Must Hazardous Waste Generator Meet?

A. Small Quantity Generator

Small Quantity Generators are required to manage hazardous wastes in an environmentally sound fashion. They are not subject to any notification or reporting requirements. Small quantity generators may use any of the following alternatives to handle hazardous wastes when disposed in quantities less than 25 kg: recycling, reuse, reclamation, disposal at a permitted sanitary landfill, neutralization and discharge to the sanitary sewer only with permission of the city, and disposal at a permitted hazardous waste disposal facility. Hazardous wastes such as solvents, sludges and pesticides are not suitable for discharge to the sanitary sewer. Small quantities of hazardous waste may NOT be disposed of by dumping on the surface of the ground or into surface waters, burying in the ground at an unpermitted site, or by using wastes such as solvents for killing weeds.

Small quantity generators who accumulate 25 kg or more of hazardous waste must recycle, treat or dispose of the waste either on site or at a hazardous waste management facility. In addition they are subject to the following requirements:

1. Package, label, mark and placard all shipments of hazardous waste in accordance with the pre-transportation requirements. All containers of hazardous waste must be marked with the words "Hazardous Waste".
2. Follow the container and tank, dating, and marking requirements.
3. Document weekly inspection of hazardous waste storage areas.

B. Kansas Generator

Kansas generators must comply with the following regulatory requirements:

1. Determine which wastes generated by the facility are hazardous by reviewing the four hazardous characteristics, the four lists of hazardous wastes or by knowledge of the process which generates the waste. All hazardous wastes must be managed by treatment on site; or by transportation to a commercial treatment, storage, or disposal (TSD) facility; or to a facility designated for recycling.

2. Obtain an EPA identification number by submitting a hazardous waste notification form to the Kansas Department of Health & Environment.

3. Prepare a manifest for all shipments of hazardous wastes.

4. Package, label, mark and placard all shipments of hazardous waste accordance with the pre-transportation requirements. All containers of hazardous wastes must be marked with the words "Hazardous Waste".

5. Prepare and maintain the following records for three years:

   - A signed copy of all manifests initiated.
   - Manifest exception report(s).
   - Hazardous waste analyses.
   - Weekly inspection reports.

6. Meet the following storage requirements for containers and/or tanks:

   For containers:

   A. Mark each container with the words "Hazardous Waste" and the accumulation start date.

   B. Maintain the containers in good condition.

   C. Use a container compatible with the hazardous waste to be stored.

   D. Keep containers closed except when adding or removing waste.

   E. Inspect storage areas weekly and maintain a log of inspections.

   F. Satellite accumulation:

1. A generator may accumulate one container of up to (55) gallons of each hazardous waste or one container of up to one quart of each acutely hazardous waste at the point of waste generation, provided the containers: are compatible with the wastes: and are marked with the words "Hazardous Waste".

2. When the generator accumulate more than the amounts listed above, the accumulation start date shall be placed on the full container. The generator shall move the full container to the hazardous waste storage area within three days.

For tanks:

A. Maintain (2) feet of freeboard in uncovered tanks without containment.

B. Conduct a waste analysis and trial tests when necessary.

C. Inspect discharge control equipment, monitoring equipment, the level of the waste in the tank, and construction materials of the tank and dikes daily. Maintain a log of inspections.

D. Do not place ignitable, reactive or incompatible wastes in tanks unless appropriate precautions are taken.

E. Provide secondary containment unless the tank is exempt.

7. Meet the following emergency prepardness requirements.

A. Designate an emergency coordinator who is on the premises at all times to coordinate emergency response measures.

B. Post the name and phone number of the emergency coordinator, the phone number of the fire department, and the location of fire extinguishers, spill control equipment and fire alarms next to one telephone which is accessible during an emergency.

C. Ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures.

D. Carry out the appropriate response to any emergency that arises.

8. Report all international shipments of hazardous waste to the Kansas Department of Health and Environment and the Environmental Protection Agency.

C. EPA Generator

EPA Generators are subject to all regulations for Kansas Generators, except for the emergency preparedness requirements, as well as the following additional requirements.

1. Provide a personnel training program to ensure that facility personnel are able to respond effectively to a hazardous waste emergency. The program must include:

   a. A director trained in hazardous waste procedures.

   b. Instruction which teaches facility personnel about location of emergency response and monitoring equipment, maintenance and operation of such equipment, communications procedure and response procedures for fires, explosions and contamination incidents. Training must be completed within six months after the date an employee enters a position.

   c. An annual review of the initial training.

   d. Development of job titles, job descriptions, a description of training to be given each job title, and a record of all training which occurs.

2. Adequately provide for preparedness and prevention with the following precautions:

   a. Proper maintenance of facilities to minimize releases of hazardous waste.

   b. Where appropriate for the type of waste generated, provide an internal communications or alarm system, a telephone or two-way radio and fire extinguishing and control equipment. All required equipment must be tested and maintained to ensure proper operation.

   c. Provide personnel working directly with hazardous waste with immediate access to communications and alarm equipment.

   d. Maintain aisle space sufficient to allow passage of personnel and fire, spill control and decontamination equipment.

   e. Make arrangements with the local hospital, police department, fire department and emergency response team to familiarize them with the plan layout and the hazards involved with the wastes generated. Such arrangements should be documented.

3. Prepare a contingency plan and implement emergency procedures to ensure the releases of hazardous waste are properly handled. The contingency plan must provide for:

a. A description of actions facility personnel must take to respond to a release.

b. A description of the arrangements made with local authorities for emergency services.

c. Designation of primary and secondary emergency coordinators and listing of their addresses and phone numbers. Assure that an emergency coordinator is on site or on call at all times.

d. A list of all emergency equipment on site, it's capabilities and its location.

e. An evacuation plan where the potential need for evacuation exists.

f. Copies of the contingency plan to be maintained at the facility and submitted to the local police department, fire department, hospital and emergency response team.

g. The contingency plan to be periodically reviewed and maintained current.

D. Land Disposal Restrictions (40 CFR 268)

Background

The 1984 Hazardous and Solid Waste Ammendments (HSWA) required EPA to evaluate all characteristics and listed hazardous wastes to determine which wastes should be restricted from land disposal. For wastes that are restricted, EPA has set treatment standards to ensure that hazardous constituents will not migrate from the disposal site.

Beyond target dates established in a schedule contained in the law, restricted wastes that do not meet the treatment standards are prohibited from land disposal. Wastes that are not appropriate for land disposal under any circumstances are banned from land disposal completely. The first rule, issued in November of 1986, prohibited land disposal of F-listed solvents and dioxin-containing wastes. The second rule included the "California List" of wastes. It prohibits the land disposal of strong acids, liquids with PCBs greater than or equal to 50 ppm, liquids containing halogenated organic compounds (HOC) or free cyanides at greater than equal to 1,000 ppm, and liquids containing heavy metals at greater than specified concentrations. Three subsequent rules established treatment standards or prohibitions for all remaining wastes. The last of these occurred on May 8, 1990.

HSWA also provided limited opportunities for delaying the effective date of prohibitions or gaining an exemption from the prohibitions. These include national capacity extensions, treatibility variances, case by case extensions and no migration petitions. For the most part, these extensions have either

expired or are not practical for a generator who does not have extremely large quantities of waste requiring disposal.

For purposes of implementing the land disposal restrictions, land disposal is defined to include: landfills, surface impoundments, waste piles, injection wells, land treatment facilities, salt domes or caves, underground mines or caves or caves and concrete vaults or bunkers. An important provision of the land disposal restrictions is that dilution cannot be used to circumvent a treatment standard for a restricted waste. Dilution as a necessary part of a waste treatment process is allowed. EPA has established regulatory requirements for generators, treatment facilities and disposal facilities.

Generator Requirements

The generator requirements under the land disposal restrictions can be divided into two general areas. The first is the determination of the applicability of the requirements to a given waste. The second is the provision of notice and certification to storage, treatment, or disposal facilities.

Determination

A generator must determine whether a waste is subject to the land disposal restrictions rules and whether the waste meets or exceeds the applicable treatment standard. For the majority of characteristic hazardous wastes, the waste must be treated to the point that it no longer exhibits the characteristic.

The second step is to determine whether the waste meets or exceeds the treatment standard. This can be done by knowledge of the waste, conducting a total waste analysis, or conducting a Toxicity Characteristic Leaching Procedure (TCLP) test. In many cases, knowledge of the process can be used to determine whether a waste exceeds the treatment standard. Knowledge of the waste or a total waste analysis cannot be used to prove that a waste does not exceed the treatment standard.

If the waste meets the treatment standard, the generator may send the waste directly to a disposal facility. If the waste does not meet the treatment standard, it must be treated to meet the standard before a land disposal facility can be used.

EPA has established three types of treatment standards. These include concentrations of contaminants in an extract of the waste, concentrations of contaminants in the waste itself and specific treatment technologies that must be used.

Notification

If a waste meets the treatment standard, the generator may send the waste directly to a land disposal facility. Except in cases where generators have

tolling agreements, the generator must provide a notice with the following information for each shipment:

- The EPA hazardous waste number(s) for the waste;
- The applicable treatment standard;
- The manifest number for the waste shipment; and
- The waste analysis data (if available).

The generator must provide a signed certification stating that the waste delivered to the disposal facility meets the treatment standard, and that the information included in the notice is true, accurate and complete. If the treatment standard is not currently applicable because EPA has granted an extension to the effective date for a particular waste, the generator is responsible for notifying the land disposal facility. Land ban notices and certifications must be maintained for five years.

If a waste does not meet the treatment standard, it must be treated prior to disposal. The generator must include a notice containing the four items noted above, with each shipment to a storage or treatment facility. This includes recyclers, reclaimers and incinerators since residues from these facilities may ultimately require land disposal.

VIII. What Hazardous Waste Management Options Are Available to a Generator?

Many alternatives exist for properly managing hazardous wastes. These alternatives are listed below in their order of desirability. With proper use of these techniques, the economic burden and liability of handling wastes can be significantly reduced.

A. Waste Minimization

Waste minimization is any change in a process that reduces or eliminates the amount of waste generated or reduces the toxicity of the waste being generated. A waste minimization plan is an important component of any comprehensive waste management program. The Hazardous and Solid Waste Amendments to RCRA of 1984 recognized the importance of this approach when declaring it to be "the initial policy of the United States that, whenever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible." Taking waste minimization from a goal to a reality has not been so easy even though it offers a business many advantages. These advantages include economic incentives, regulatory compliance, worker safety and protection of the environment.

Waste minimization changes that reduce the volume or toxicity of a hazardous waste can result in lower treatment and disposal costs; a decrease in the long-term liability associated with disposing of hazardous waste at off-

site disposal facilities, and provide a safer work place by reducing the exposure of workers to hazardous materials. They can also change the generator status of a facility resulting in a lesser regulatory burden and lower the generator monitoring fees for a facility.

Any type of waste minimization activity also benefits the environment through preservation of natural resources that go into manufacture of raw materials and reducing the need for hazardous waste management facilities.

Waste reduction can only be accomplished if there is a commitment to the goal throughout the organization. The first step in minimizing wastes is to identify all waste streams and the processes that generate them. The following changes represent a few of the actions that can be taken to reduce or eliminate excess waste generation.

- Managing the hazardous materials inventory to ensure that hazardous materials do not become hazardous wastes when processes or product specifications change.

- Use only the amount of raw material needed to perform the task. Many facilities have substantially reduced the amount of paints and solvents needed by training workers in improved painting and cleaning methods.

- Ensure that all products and wastes are clearly labeled and properly stored. Improper storage can result in accidental contamination of a product or require expensive testing to identify a product.

- Substitute a non-hazardous product for a hazardous one. Changing primers or paints to products that do not contain heavy metals is one of the most common waste minimization changes.

- Use sludge dryers; filter presses or similar equipment to reduce the volume of liquid wastes generated in large quantities.

- Replace existing equipment with more efficient equipment to perform the same operation. In the coating industry, for example, replacement of conventional air-atomizing spray equipment with electrostatic or powder coating equipment can result in a substantial waste reduction.

B. Material or Energy Recovery

Material recovery occurs when a waste is treated to allow continued use as a raw material. An example is the distillation of contaminated solvents. This may be done with a small still at the generator's facility or by a commercial recycling firm. The method results in savings on the purchase of raw materials and reduces the volume of waste requiring disposal.

Energy recovery occurs when a waste with fuel is burned as a fuel in an industrial boiler or furnace. This method is appropriate for solvents that have been contaminated to the point where they are no longer suitable for distillation. This alternative is not suitable for chlorinated solvents or other hazardous wastes with fuel values below 6,000 BTU per pound. The most common form of energy recovery in Kansas is the use of spent solvents as supplemental fuels in cement kilns.

C. Waste Treatment

Many hazardous wastes can be treated or rendered them non-hazardous. This can be done at a commercial treatment facility or at a generator's site. An example of a form of treatment performed by many generators is neutralization of an acid or caustic waste to allow discharge of the treated waste to a wastewater treatment plant. Other forms of treatment include fixation, stabilization, solidification, chemical reduction and incineration.

Some form of treatment, such as neutralization, can be performed by a generator without requiring a treatment permit. In general, treatment can only be performed by a permitted facility.

D. Ultimate Disposal

Hazardous wastes which are not suitable for any of the above recycling or treatment techniques must be ultimately disposed of by chemical destruction, deep well injection, or land burial. Many of the treatment techniques discussed above also result in residues which must be disposed. Disposal via deep well injection and land burial is restricted to certain types of hazardous wastes and should be reserved for situations where alternative management methods are not possible.

IX. Choosing a Hazardous Waste Management Facility

If a firm generates hazardous waste which must be shipped off-site for treatment or disposal, we must be careful to ensure that our waste will be managed according to state and federal regulations. This is to protect our company from the liability risks we face as a generator.

If possible, a visit to the treatment, storage and disposal facility should be made prior to shipping wastes. An assessment then must be made on the way our wastes will be handled. If a visit is not possible then the regulatory agencies should be contacted to speak to the inspector of the facility concerning the firm's operating record and current regulatory status.

The following section provides questions to ask of the facility's sales representatives state regulatory staff and, if visited, facility staff.

A. Selecting a Facility

Questions should be asked of a facility's representative along with questions of environmental officials in the state where the facility is located. The following questions should be addressed to the facility representative.

- Are they acting as the final treatment/disposal facility or are they a broker? If they are a broker, how is the actual facility going to treat or dispose of the waste?

- Who are some of their customers in our area with similar wastes? Check the company's reputation with their other customers.

- How will the waste be transported to the facility? Does the company use their own vehicles or a contract carrier?

- Obtain a copy of the company's EPA Notification of Hazardous Waste Activity (Form 8700-12), and copies of portions of permits which cover the kinds of wastes handled at the facility.

- Does the facility have a minimum charge for their services for each shipment?

- Is a waste sample required? If so, what fee is assessed for analysis? If you have already had the waste analyzed by an outside laboratory, is that analysis acceptable?

- How long will it take to complete arrangements for shipment?

Contact the regulatory agency which monitors the facility. Ask to speak with the person most familiar with the site. Some suggested questions to ask are:

- Is the facility currently in compliance with all regulations? If not, what are their deficiencies?

- Is the facility currently under any consent orders for past deficiencies?

- Has the facility received any fines in the past?

- How often is the facility inspected?

- Is the facility listed on the NPL (Superfund cleanup) list?

B. Before Arranging Waste Shipment

- Obtain a copy of the facility's certificate of insurance.

- Obtain a contract with the facility for their services. Know where you waste is going, how it is being managed, and disposition of any residues, ash, and empty drums.

X. How to Avoid Compliance Problems And Minimize Liability

The following recommendations are intended to help ensure compliance with the hazardous waste regulations and to minimize the liability associated with generating hazardous wastes.

- Locate and deal with reputable transportation, treatment and disposal firms. If the price quote is substantially less than the competition, there is probably a reason why.
- Have backup transporters and disposal sites selected in case your primary provider has problems.
- Recognize when you lack expertise to handle a particular problem and seek out help from a person with expertise in hazardous waste management.
- Follow up on all hazardous waste shipments to ensure they reach their intended destination and are treated or disposed.
- Do not mix hazardous wastes with non-hazardous wastes. The resultant mixture will be a hazardous waste and may be more difficult or costly to dispose than the original waste.
- Maintain all records regarding the hazardous waste program (test results, contingency plan, manifests, exception reports, annual reports, training documents) in one location.
- Designate one employee with an appropriate background to be responsible for hazardous waste management. Give the employee the authority and resources to do the job, then hold him or her accountable.
- Conduct inspections of your facility and its operations. Do so with an open mind and no preconceived notions of the way things ought to be.

XI. Resources Available to Assist In Properly Managing Hazardous Waste

A. Kansas Department of Health and Environment

KDHE has six district offices in Kansas. Staff members with hazardous waste program expertise are in each of these district offices.

KDHE periodically offers training opportunities throughout the state. For information concerning training or other questions pertaining to hazardous waste regulations, you may contact the KDHE Topeka Office. Contacts and phone numbers are listed below:

- Waste Policy, Planning and Outreach Section – (785) 296-1617

- Waste Programs Compliance & Enforcement Unit – (785) 296-1604

The Kansas State University (KSU) Engineering Extension Program can also provide technical assistance in hazardous waste management. KSU specializes in providing information on waste minimization. They may be contacted at (785) 532-6026.

B. US Environmental Protection Agency (EPA)

EPA operates a hazardous waste hotline to provide information on the federal hazardous waste regulations to interested parties. The toll-free telephone number is (800) 424-9346. EPA also staffs a regional office in Kansas City, Kansas (EPA Region VII). The Region VII office maintains a library of current regulations, guidance documents, and training manuals. Many of these materials are available to the public at no cost. The telephone number for the Region VII information resources center is (913) 551-7241.

It should be noted that while Kansas Statutes and Regulations generally mirror Federal laws and regulations, differences do exist between the State and Federal Programs. Therefore, KDHE staff should be consulted prior to acting on any information which requires a regulatory interpretation.

C. Other Sources of Training/Information

- Kansas State University

  Specializes in providing information on waste minimization.

- University of Kansas

  Offers a number of training opportunities through ifs Division of Continuing Education.

- Other Institutions

  Offer environmental training.

- Trade Associations

  Some associations offer advice and assistance in interpreting regulations. Some also offer training courses, seminars, or conferences focusing on the interpretation and application of regulations.

- Technical Journals/Publications

  Various technical journals and publications are available which address specific areas of hazardous waste handling. Some are located in local

libraries, however, the majority of these publications will be found in major university libraries.

HAZARD COMMUNICATION PROGRAM

Revised

OK

EXCEL INDUSTRIES, INC.
HAZARD COMMUNICATION
PROGRAM

February 24, 1999

1. General Information

Excel Industries, Inc. is concerned with the safety & health of its employees and as a continuing program of the Safety Program we have written this Hazard Communication Program. This program is an extension of other Excel Industries, Inc. Policies that have been adopted for the concern of our employees. This program complies with the "Right-To-Know" Regulations of the Occupational Safety and Health Administration as well as the State of Kansas Standard on "Hazard Communication".

A. Container Labeling

Excel Industries' Inc. receiving/Inspection Department is to verify that all containers of hazardous chemicals conform in accordance with Excel Industries, Inc. Quality Control Manual Section II M.

-Be clearly labeled as to the contents

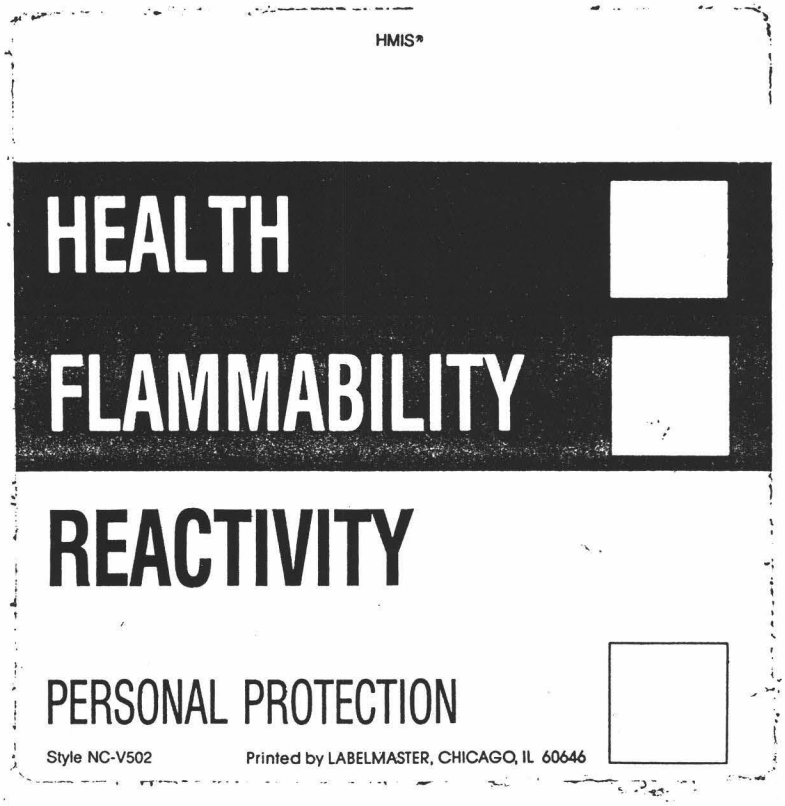
-Indicate the appropriate hazard warnings, and

-List the name and address of the manufacturer

Department Supervisors insure that all secondary confainers are labeled with either an extra copy of the original manufacturer label or with a generic label, which has a block for identiy and blocks for the appropriate hazard warning.

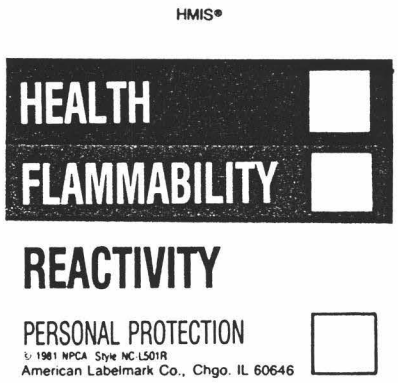
The following descriptive label is used to identify and indicate warning hazards on all in-plant containers providing the complete label can be positioned on the container properly.

THIS AREA INTENTIONALLY LEFT BLANK



#NC-V502 Labelmaster
4" X 4" HMIS Label

The following descriptive label is used to identify and indicate warning on all small in-plant containers which will not accept the larger #NC-V502 label. These labels are used as the master identification sticker which will be attached to their appropriate "original", Material Safety Data Sheet (MSDS).



#NC-L501 Labelmaster
2" X 2" HMIS Label

The following wall chart will be posted in the following departments for employees reference on container labeling hazard identification:

Engineering
Fabrication
Maintenance
Tooling
Welding
Product Finish (Grinding)
Painting
Assembly
Service, and
Shipping/Receiving/Inspection

#NC-ES Labelmaster
22" X 28" HMIS Wall Poster

The Excel Industries, Inc. Safety Committee reviews the Company labeling system on a yearly basis and makes recommendations to update the system when required, such as when a manufacturer's label changes.

B. Material Safety Data Sheets (MSDS)

The Facilities Manager is responsible for designating products that may contain Hazardous Chemicals and is responsible for obtaining, maintaining, and receiving the

Material Safety Data Sheets for Excel Industries, Inc. All Hazardous Chemicals are assigned a part number and processed through Excel Industries, Inc. normal Engineering Release System.

Copies of MSDSs for all Hazardous Chemicals to which employees of Excel Industries, Inc. may be exposed are kept in the Master Product Specification files located in the Personnel Department and in the Master Receiving/Inspection file. The unlocked drawers hold a master copy of all purchased parts specification. All purchased material is checked against the Master Receiving/Inspection file to verify the product specifications.

MSDSs will be available to all employees during normal working hours. For an employee to see a MSDS he/she is responsible to contact his/her supervisor.

C. Employee training and Information

Excel Industries, Inc. Personnel Department is responsible for the employee training program, in order to ensure that all elements specified below are carried out.

Prior to starting work, during the employee orientation sessions, each new employoee of Excel Industries, Inc. attends a Health & Safety Orientation which is part of the Personnel Orientation Program submitted to all incoming personnel. During this orientation session employees receive information and training on the following:

-An overview of the requirements contained in the Hazard Communication Standard

-A discussion of classes and types of Hazardous Materials

-Information contained on a MSDS covering the key sections and terms

-Explanation of where the MSDSs can be found and the procedures employees can take to have access to the MSDSs and other information required in the Hazard Communication Standard.

> Copies of Material Safety Data Sheets for all Hazardous Chemicals to which employees may be exposed are kept in the Master Receiving/Inspection file. The unlocked drawers hold a master copy of all purchased parts specifications. All purchased material is checked against the Master Receiving/Inspection file to verify the product specifications.

-Special safety control practices Excel Industries, Inc. uses to reduce exposure and risk.

-The labeling system used by Excel Industries, Inc. and how to recognize the type and degree of hazard.

-Chemical present in the individual work place that the employee will be exposed to in his/her normal work.

See separate chemical inventory sheets for the part number, description, and where used listings of all Hazardous Chemicals.

-Emergency steps to take if an accident occurs involving any hazardous material.

In the event of an accident involving any Hazardous Chemical the employee is to notify his/her supervisor or departmental first aid person. The first aid person will administer initial first aid and additional emergency personnel will be called if considered necessary.

This company has established the Excel Industries, Inc. Hazardous Waste Generator Contingency Plan. The procedure set forth in this Plan dictates the Emergency Coordinators, Implementation Plans, Coordination Agreements, and Evacuation Plans. This Contingency Plan is found in the Supervisors Handbook. In the event of a Hazardous Material spill or emergency, this Contingency Plan will be followed.

After attending the Health and Safety Orientation sessions the employee is allowed to ask any questions concerning any information given.

Prior to a new Hazardous Chemical being introduced into any area of Excel Industries, Inc., the buyer of the product is responsible for ensuring that the MSDS on the new chemical is available and that the procedures are followed in setting up a new product file.

Prior to the introduction or use of any new Hazardous Chemical, each employee in the designated area of its use will be given the necessary Hazardous Communication training on that chemical.

D. Employee Re-Training

Company Policy requires that all employees be given an annual refresher course containing the information as indicated in (1) (C).

E. Transferred Employees

It is the responsibility of the Department Supervisor to which an employee is being transferred to train transferred employees prior to their exposure to a new Hazardous Chemical.

F. Record of Training

The Personnel Department is responsible to keep track of all training which has taken place as to who received the training and when the training took place.

2. Hazardous Non-Routing Tasks

Periodically employees may perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee will be given information by their supervisor about Hazardous Chemicals to which they may be exposed during such activity.

This information includes:

-Specific chemical hazards

-Protective measures the employee can take

-Procedures Excel Industries, Inc. has taken to lessen the hazards including ventilation, protective equipment, presence of another employee, and emergency procedures.

3. Informing Contractors

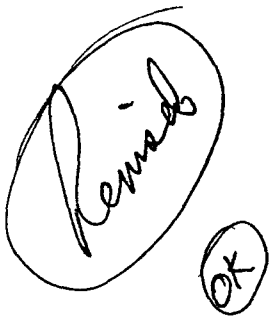
It is the responsibility of the Facility Manager to provide contractors, with employees, the following information:

-Hazardous Chemicals and processes to which they may be exposed while on the job site.

-Precautions the employees may take to lessen the possibility of exposure by usage of appropriate protective measures.

The Facility Manager is responsible for contacting each contractor before work is started at Excel Industries, Inc. to gather and disseminate any information concerning Chemical Hazards that the contractor is bringing to our work place.

HAZ WASTE CONTINGENCY PLAN



EXCEL INDUSTRIES, INC.
HAZARDOUS WASTE GENERATOR
CONTINGENCY PLAN

February 23, 1999

This Contingency Plan is submitted in compliance with 40CFR 265.52 - 40CFR 265.56

This Plan contains nine parts:

1. General Information
2. Emergency Coordinator
3. Implementation of Contingency Plan
4. Emergency Response Procedures
5. Emergency Equipment
6. Coordinator Agreements
7. Evacuation Plan
8. Required Reports
9. Contingency Plan Holders

1. General Information

- EPA I.D. No.: KSD007237290
- Name: Excel Industries, Inc.
- Location: 200 South Ridge Road, Hesston, KS 67062
- Telephone No.: (316) 327-4911
- Operator: Paul Mullet, President
  [redacted]
  Telephone: (316) 327-1115 (Office)
  [redacted] (Home)

  Ex. 6 PII
- Type of Facility: Manufacturer of industrial & Commercial Turf & Grounds Maintenance Equipment as well as Roll Over Protective Structures (R.O.P.S.) for Industrial Excavation Equipment.

Description of Treatment, Storage, and/or Disposal Activities:

-Waste urethane paint filter media may be collected in (55) gallon drums. This waste is not a hazardous waste. This waste is collected from the primary & top coat paint booths during filter changes. This material is only collected if there is a backlog of filter material to be burnt. This material or it's ashes can be taken to the Harvey County Landfill when they are generated.

-Waste Naptha (Mineral Spirits) is contained in (15) gallon drums. This waste is hazardous because it is a combustible liquid. This waste is located in parts wash vats provided by Safety-Kleen, Inc. The vats have circulating pumps on them which recycle the liquid filtering out contaminants. This material is picked up & replenished by Safety-Kleen, Inc. Contaminants are removed & liquid replenished from these systems every (8) weeks.

-Waste Combustible Liquid is collected in a (5) gallon container. This waste is hazardous because of it's flash point. The waste is collected from a self contained wash stand furnished by Safety-Kleen, Inc. used to clean paint guns & related equipment. This material is picked up & replenished by Safety-Kleen, Inc. Contaminants are removed & liquid replenished from these systems every (4) weeks.

-Waste Liquid Paint (from air dry or baked enamel paint) is collected in (55) gallon drums. This waste is hazardous because of it's flash point. This waste is collected from the residue remaining during color or drum change. This material is picked up by Safety-Kleen, Inc. when it is generated.

-Waste Thinner (D100 or D150 or Mineral Spirits) is collected in (55) gallon drums. This waste is hazardous because of it's flash point. This waste is collected from the cleaning operations such as cleaning paint guns, paint pots & related equipment. This material is picked up by Safety-Kleen, Inc. when it is generated.

-Waste Gasoline and Water is collected in (55) gallon drums. This waste is hazardous because of it's flash point. This waste is collected when gasoline tanks on our products become contaminated with rust and water. This material is picked up by Safety-Kleen, Inc. when it is generated.

-Waste Antifreeze and Oil is collected in (55) gallon drums. This waste is a controlled waste because it contains ethylene glycol. This waste is collected when antifreeze and oil are drained from turf equipment due to production reasons. This material is picked up by Safety-Kleen, Inc. when it is generated.

-Waste Ashes are collected in (55) gallon drums. This waste is

not a hazardous waste. This waste is collected from a process which burns paint off of paint hooks. The paint is burned off these hooks so they can be reused. Additional processes which generate these ashes is the burning of paint filter media. The ashes are taken to the Harvey County Landfill when they are generated.

-Used Batteries are collected on pallets. These batteries are not a hazardous waste. Used batteries come from Material Handling equipment. Batteries are stored and picked up by Ash Battery Systems or GNB Technologies or Auto Castings Recovery when they are generated.

-Used Oil is collected in a "USED OIL" bulk tank. This waste is not a hazardous waste. This waste is collected from vehicle & equipment maintenance. This material is picked up by Safety-Kleen, Inc. when it is generated.

-Used Coolant is collected in a "USED COOLANT" bulk tank. This waste is not a hazardous waste. This waste is collected from the sumps of production machines like drill presses, surface grinders & metal cutting saws. This material is picked up by Safety-Kleen, Inc. when it is generated.

-Used Tires are collected on pallets. These tires are not a hazardous waste. This waste is collected from used equipment. This material is transported to the Harvey County landfill when it is generated.

-Used fluorescent lamps are collected in boxes supplied by Safety-Kleen. This waste is a controlled waste because it contains mercury. This waste is collected when fluorescent lamps from light fixtures are changed in our facility. This material is picked up by Safety-Kleen when it is generated.

Facility Site Plan: See Diagram on next page. Drawing No.: FACILITY-12

2. Emergency Coordinators

- Primary Emergency Coordinator
  Lelyn Peters, Facilities Manager
  [redacted]
  Telephone (316) 327-1211 (Office)
  [redacted] (Home)
  Pager[redacted] (Excel's)
  Fire Department Pager [redacted]

Ex. 6 PII

- Alternate Emergency Coordinator
  Richard Blouin, Maintenance Supervisor
  [redacted]
  Telephone (316) 327-1181 (Office)

[redacted] (Home)
Pager [redacted] (Excel's) Ex. 6 PII

-The emergency coordinators can appoint fellow employees to assist them in the event of an emergency.

-The emergency coordinator serves as chief of the emergency crew

-The above named coordinators have received vital emergency response training, are familiar with the waste generation process and have had additional fire or first aid training.

-The above named coordinators are always "on call", they may be contacted by telephone or by an internal paging system.

3. Implementation of the Contingency Plan

- It will be the duty of the emergency coordinator to implement this contingency plan should an accident threaten human health or the environment.
- Depending upon the degree of seriousness, the following potential emergencies might call for implementation of this contingency plan:
- Punctured or ruptured drum containing:
- Waste Methyl Propyl Ketone & Waste Urethane Paint
- Waste Naptha (Mineral Spirits)
- Waste Combustible Liquid (Paint Gun Cleaning Station)
- Waste Liquid Paint (Air Dry or Baked Enamel)
- Waste Thinner (Solvents)
- Waste Gasoline & Water
- Spilled or ruptured drum containing:

  -Waste Antifreeze & Oil

  -Waste ashes
- Spilled or ruptured batteries
- Spilled or ruptured bulk "USED OIL" tank
- Fire in the area of the paint pump house where wastes are gathered during drum filling operations

- Fire in the area of the where wastes are gathered prior to the 90 day shipping requirement

4. Emergency Response Procedures

- Notification

-Any employee discovering a fire or hazardouse materials release, as indicated in Section 3, must immediately notify his/her supervisor and the emergency coordinator.

-In case of a fire in the pump house or the immediate area the supervisor is to activate the fire alarm. All employees are to evacuate the building. The supervisor or emergency coordinator will call the Hesston Fire Department @ 9-1-1 with vital information and have them respond. He/she will then proceed to the hazard area & contain the fire with fire extinguishers.

-In case of a fire in the 90 day holding area the supervisor or emergency coordinator will call the Hesston Fire department @ 9-1-1 with vital information and have them respond. At this point it has been determined that plant wide evacuation is not necessary. He/she will then proceed to the fire with fire extinguishers.

-In case of a hazardous materials release in the hazardous waste filling area or the 90 day holding area, the supervisor will inform the emergency coordinator of the situation. A response team consisting of trained personnel from the Maintenance Department will respond & clean up the affected area.

-All employees hearing the fire alarm must immediately evacuate the building from the nearest means of egress other than the affected area. No employee will be allowed to reenter the building until the "all clear" is given by the emergency coordinator.

-The emergency coordinator will evaluate each such situation and notify the appropriate parties identified in Section 6.

-The emergency coordinator will call the National Response Center (800-424-8802) and report the incident. The report will include the following:

*Name and telephone number of the reporter.

*Name & address of the facility.

*Time & type of incident (i.e. spill occurred @ 10:00 A.M.).

*Identification & quantity of materials involved (i.e. 60 gallons of "Waste Flammable Liquid").

*The extent of injuries (i.e. one victim with multiple trauma & skin rash).

*The possible hazards to the environment & human health outside this facility (i.e. possible contamination of ground water).

*The emergency coordinator will take a head count of all persons in the affected area to determine whether all employees are accounted for.

- Containment & Control

-The emergency coordinator will take all necessary measures to contain all hazardous conditions & to prevent it's spread to surrounding property areas.

-In case of a spill, absorbent material will be placed on the spill. All affected material (i.e. contaminated soil & absorbent material) will be considered a hazardous waste.

-While handling material from a hazardous waste spill, protective clothing must be worn. Those pieces of apparel are: rubber boots, rubber apron, rubber sleeved gloves & a face shield.

- Follow Up Actions

-Following containment & control of the emergency, the emergency coordinator will provide for collection of the hazardous waste & contaminated soil, water or other materials.

-The emergency coordinator will ensure that all emergency apparel is cleaned & placed back in service. This equipment will be checked & replace if necessary.

-The emergency coordinator will remove from service & replace any fire extinguishers which have been discharged. The fire extinguishers will be replaced into positions from which they were originally removed.

-The emergency coordinator will investigate the cause of the spill, rupture or fire & will take steps to prevent a

reoccurrence of such or similar incidents.

-The emergency coordinator will make sure that the cause of the emergency has been eliminated & the clean-up and restoration has progressed to the point of not jeopardizing the health & safety of the employees, and that E.P.A., K.D.H.E, & other local authorities have been notified, before permitting resumption of operations affected by the emergency.

5. Emergency Equipment

- All areas of this plant have access to 20A10BC rated dry chemical fire extinguishers.
- All areas of this plant have access to absorption material for spill clean-up.
- Shovels & squeegies are available for cleanup from the Maintenance Department.
- The Hesston Fire Department is at our disposal 24 hours per day. It is a well trained & organized group of firefighters dedicated for the purpose of fighting & preventing fires. They have also been trained to the operations level in hazardous materials. Mutual aid agreements have been made with surrounding Fire Departments should additional help be needed.
- The Hesston Ambulance Department is also at our disposal 24 hours per day. This organization is equipped and well trained to respond to emergencies of any sort. The response time for both departments is minimal.
- The paint pump house is covered by an automatic sprinkler system which when activated sends an alarm to the Harvey County Communications Center in Newton, Kansas. The Hesston Fire & Ambulance Departments are dispatched from there.
- There is a "Y" connection on the north side of the Plant #1 building connected to the automatic sprinkler system which can be used by the Hesston Fire department to boost the line pressure in the sprinkler system from 45 psi to 200 psi.
- This facility is equipped with two fire hydrants which can be used by the Hesston Fire department for additional water as needed during a fire.
- The Hesston Fire department is equipped with foam agents & equipment to apply foam to liquid fires.
- This plant is equipped with First Aid Stations & trained First Aid

personnel. Trained First Aid personnel are located in all departments throughout the plant.

- An eye wash satation with a shower is located along the east wall inside the Plant #1 facility. Additional eye wash stations are located throughout the facilities.

- The Safety Committee meets monthly to discuss safety conditions throughout all departments.

- A First Aid vehicle is available to transport individuals to and from doctor's office.

6. Coordination Agreements

- Hesston Fire Department (Telephone 9-1-1)

  -The Hesston Fire Department has received a copy of this Contingency Plan.

  -The Hesston Fire Department has received special training on the handling of hazardous materials & fighting liquid fires.

  -The Hesston Fire Department has direct communication capabilities, via two way radio, with the Hesston Police Department, the Hesston Ambulance Department, Harvey County Dispatch & the Harvey County Emergency Management Coordinator.

  -The Hesston Fire Department has conducted several preplanning sessions throughout their facility.

- Hesston Police Department (Telephone 9-1-1)

  -The Hesston Police Department has received a copy of this contingency plan.

  -The Hesston Police Department has direct communication capabilities, via two way radio, with the Hesston Fire Department, the Hesston Ambulance Department, Harvey County Dispatch & the Harvey County Emergency Management Coordinator.

- Hesston Ambulance Department (Telephone 9-1-1)

  -The Hesston Ambulance Department has a copy of this contingency plan.

  -The Hesston Ambulance has received special training on handling hazardous materials and the treatment of exposures to hazardous materials as well as burns from fires.

-The Hesston Ambulance Department has direct communication capabilities, via two way radio, with the Hesston Fire Department, the Hesston Police Department, Harvey County Dispatch & the Harvey County Emergency Management Coordinator.

- Harvey County Emergency Management Coordinator (Telephone 9-1-1)

  -The Harvey County Emergency Management Coordinator has received a copy of this contingency plan.

  -The Harvey County Emergency Management Coordinator has received special training on hazardous materials & the treatment of exposures to hazardous materials as well as burns from a fire.

  -The Harvey County Emergency Management Coordinator has direct communication capabilities, via two way radio, with the Hesston Fire Department, the Hesston Police Department, Harvey County Dispatch & the Hesston Ambulance Department.

- Newton Medical Center (Telephone 316-283-2700)

  -Newton Medical Center personnel have a copy of this contingency plan.

  -Newton Medical Center personnel have received a special briefing on the health hazards of "Waste Flammable Liquids", "Waste Naptha", "Waste Liquid Paint", "Waste Gasoline & Water", "Waste Antifreeze & Oil" for the treatment of exposure for each hazardous material.

- Dr. Mark Hall (Telephone 327-2440)

  -Dr. Mark Hall's office has received a special briefing on the health hazards of "Waste Flammable Liquids", "Waste Naptha", "Waste Liquid Paint", "Waste Gasoline & Water", "Waste Antifreeze & Oil" for the treatment of exposure for each hazardous material.

- National Response Center (Telephone 800-424-8802)

  -The National Response Center in Washington has been contacted to obtain guidance on notification procedures should a spill or rupture occur. Information needed for the National Response Center includes the following:

  *Name of reporter

*Company name

*Telephone number

*Specific location of discharge

*Time of discharge

*Body of water if appropriate

*Source of discharge

*Cause of discharge

*Operation in process during discharge

*Vehicle identification if appropriate

*Number of dead

*Number of injured

*Status of injured

*Property damage

*Quantity of discharge

*Quantity of discharge material reaching body of water

*Weather conditions

*What actions are being taken @ the scene to secure the discharge, contain the discharge & to recover the discharge

*What other agency has been notified

*Chemical name of discharge

*Characteristics of discharged material

7. Evacuation Plan

- The Hesston Police, Fire & Ambulance Departments will serve as an evacuation tool to remove all personnel from the building if the emergency coordinator determines necessary.

- The fire alarm will be used if there is a fire.

- All personnel are to exit to the nearest door not affected by the

emergency.

- All personnel are to remain outside the building until given the "all clear" to reenter by the emergency coordinator.

- All personnel are to stay clear of the affected area so that emergency vehicles have access to the emergency situation.

8. Required Reports

- The emergency coordinator will notify E.P.A. Regional Administration and the State of Kansas Department of Health & Environment that the follow up actions have been implemented.

- The emergency coordinator will note in the operating records the time, date & details of any incident that requires implementation of this contingency plan & will submit a report on the incident to the E.P.A. Regional Administrator accordance with 40 CFR 265.56 (j).

- The emergency coordinator will revise this contingency plan in accordance with the experience required during each emergency situation & will send copies of the revisions to each holder of the original plan.

9. Contingency Plan Holders

- Paul Mullet, President
  Excel Industries, Inc.
  200 South Ridge Road
  Hesston, Kansas 67062
  Telephone: (316) 327-1115

- Bob Mullet, Director of Finance & Human Resources
  Excel Industries, Inc.
  200 South Ridge Road
  Hesston, Kansas 67062
  Telephone: (316) 327-1148

- Lelyn Peters, Facilities Manager
  Excel Industries, Inc.
  200 South Ridge Road
  Hesston, Kansas 67062
  Telephone: (316) 327-1211

- Lelyn Peters, Fire Chief
  Hesston Fire Department
  115 East Smith
  Hesston, Kansas 67062
  Telephone: (316) 327-2221

- Kurt Ford, Police Chief
  Hesston Police Department
  115 East Smith
  Hesston, Kansas 67062
  Telephone: (316) 327-2020

- Russell Buller, Ambulance Chief
  Hesston Ambulance Department
  115 East Smith
  Hesston, Kansas 67062
  Telephone: (316) 327-2221

- Newton Medical Center
  600 Medical Center Drive
  Newton, Kansas 67114
  Telephone: (316) 283-2700

- Dr. Mark Hall, Physician
  444 North Lancaster
  Hesston, Kansas 67062
  Telephone: (316) 327-2440

- Lonnie Buller, Harvey County Emergency Management Coordinator
  Harvey County Courthouse
  Newton, Kansas 67114
  Telephone: (316) 283-6010

- Richard Blouin, Maintenance Supervisor
  Excel Industries, Inc.
  200 South Ridge Road
  Hesston, Kansas 67062
  Telephone: (316) 327-1181

- Owen Kaufman, Manager of Manufacturing
  Excel Industries, Inc.
  200 South Ridge Road
  Hesston, Kansas 67062
  Telephone: (316) 327-1120

EVACUATION PLANS

EVACPLT 1

EVACPLT 2

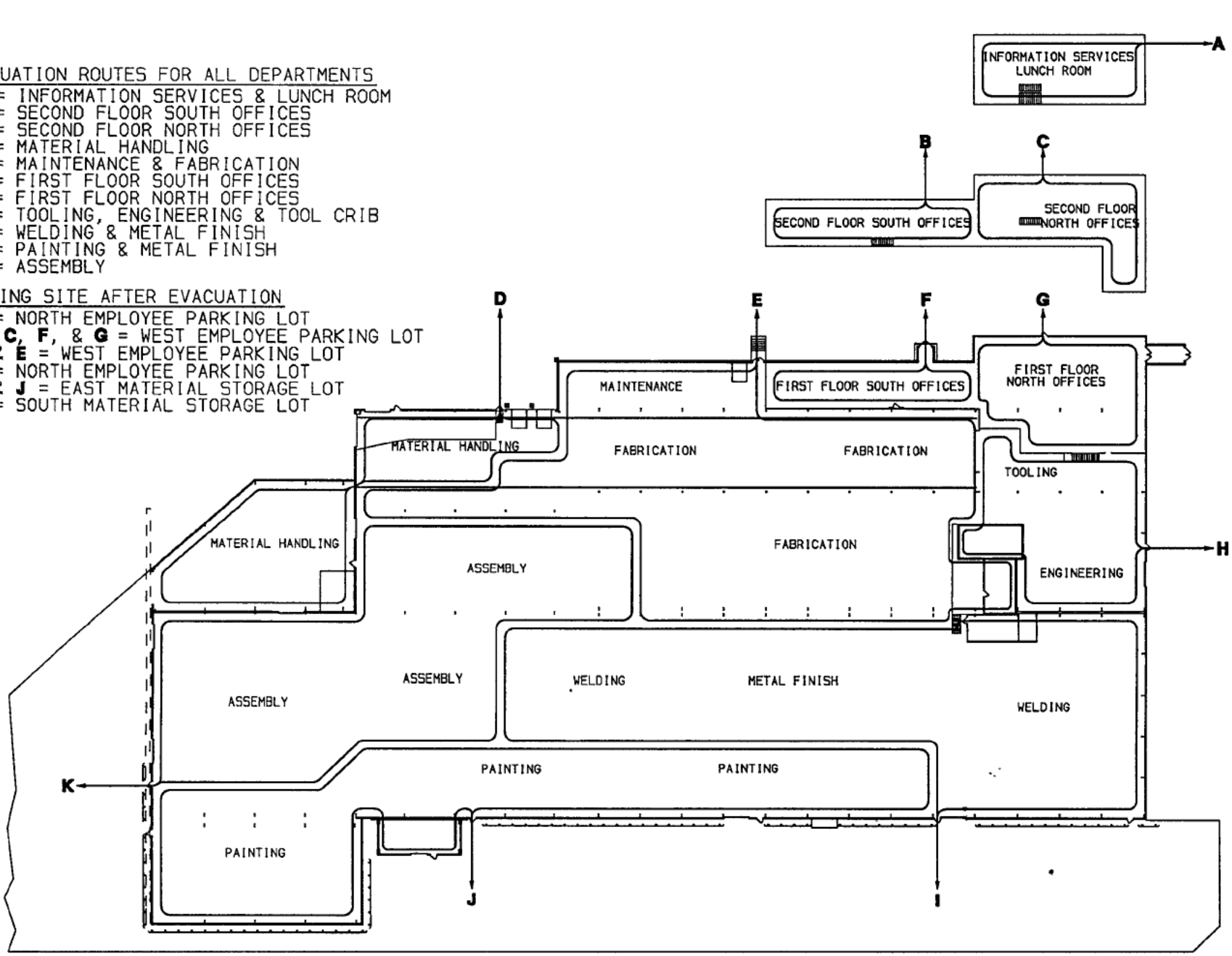
EVACPLT 3

EVACUATION ROUTES FOR ALL DEPARTMENTS

A = INFORMATION SERVICES & LUNCH ROOM
B = SECOND FLOOR SOUTH OFFICES
C = SECOND FLOOR NORTH OFFICES
D = MATERIAL HANDLING
E = MAINTENANCE & FABRICATION
F = FIRST FLOOR SOUTH OFFICES
G = FIRST FLOOR NORTH OFFICES
H = TOOLING, ENGINEERING & TOOL CRIB
I = WELDING & METAL FINISH
J = PAINTING & METAL FINISH
K = ASSEMBLY

MEETING SITE AFTER EVACUATION

A = NORTH EMPLOYEE PARKING LOT
B, C, F, & G = WEST EMPLOYEE PARKING LOT
D & E = WEST EMPLOYEE PARKING LOT
H = NORTH EMPLOYEE PARKING LOT
I & J = EAST MATERIAL STORAGE LOT
K = SOUTH MATERIAL STORAGE LOT



EMERGENCY EVACUATION ROUTES
PLANT ONE

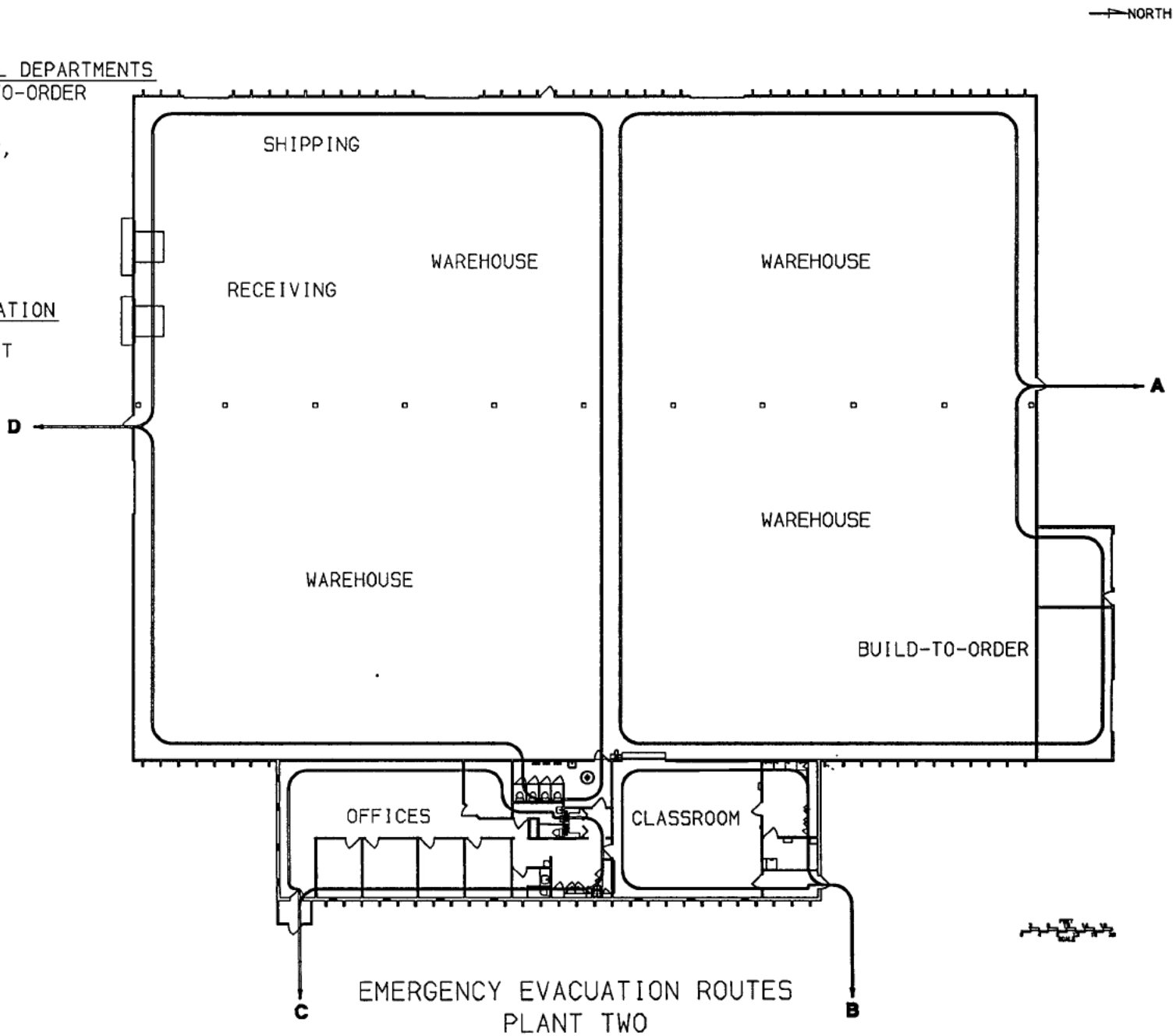
PLANT ONE
PLANT LAYOUT
EVACPLT1

EVACUATION ROUTES FOR ALL DEPARTMENTS

A = WAREHOUSE & BUILD-TO-ORDER
B = CLASSROOM
C = OFFICES
D = SHIPPING, RECEIVING, & WAREHOUSE

MEETING SITE AFTER EVACUATION

A = NORTH OPEN LOT
B & **C** = EAST PARKING LOT
D = SOUTH OPEN LOT



EMERGENCY EVACUATION ROUTES
PLANT TWO

PLANT TWO
PLANT LAYOUT
EVACPLT2

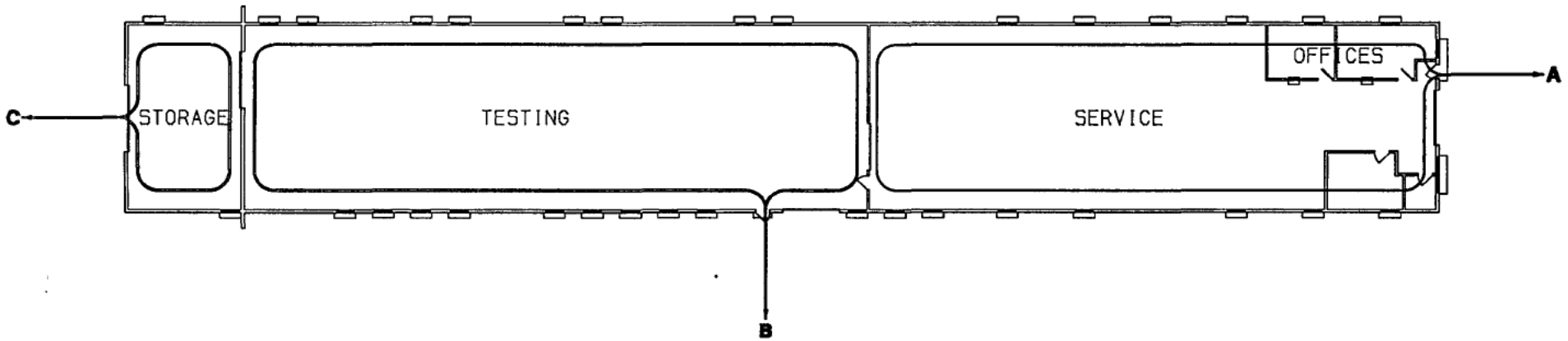
NORTH

EVACUATION ROUTES FOR ALL DEPARTMENTS

A = OFFICE & SERVICE
B = TESTING
C = STORAGE

MEETING SITE AFTER EVACUATION

A = EAST OPEN LOT
B = SOUTH STORAGE YARD
C = WEST STORAGE AREA



EMERGENCY EVACUATION ROUTES
PLANT THREE

PLANT THREE
PLANT LAYOUT
EVACPLT3

EMERGENCY EQUIPMENT LOCATIONS

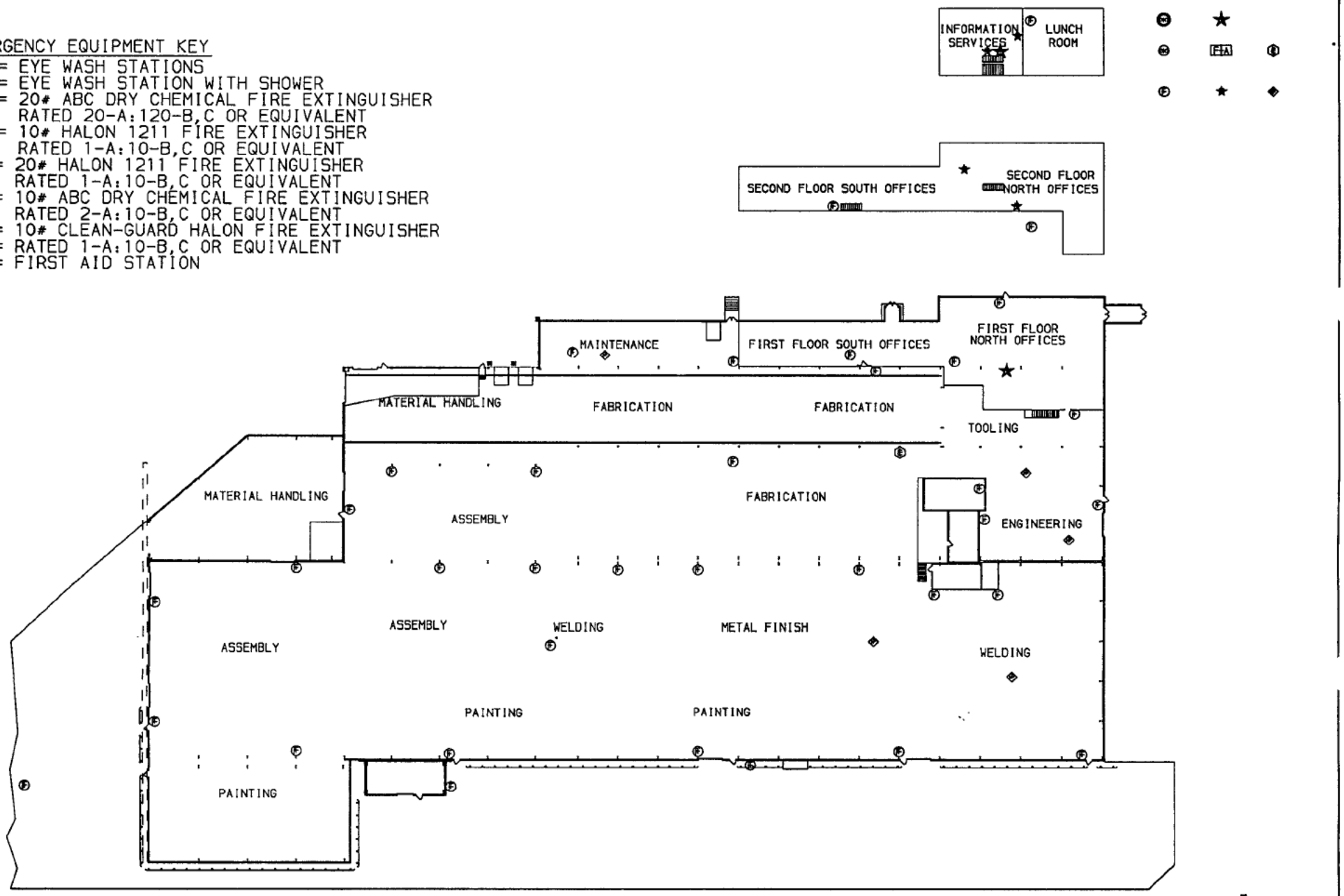
FIREXTPLT1

FIREXTPLT2

FIREXTPLT3

EMERGENCY EQUIPMENT KEY

- = EYE WASH STATIONS
- = EYE WASH STATION WITH SHOWER
- = 20# ABC DRY CHEMICAL FIRE EXTINGUISHER RATED 20-A:120-B,C OR EQUIVALENT
- = 10# HALON 1211 FIRE EXTINGUISHER RATED 1-A:10-B,C OR EQUIVALENT
- = 20# HALON 1211 FIRE EXTINGUISHER RATED 1-A:10-B,C OR EQUIVALENT
- = 10# ABC DRY CHEMICAL FIRE EXTINGUISHER RATED 2-A:10-B,C OR EQUIVALENT
- = 10# CLEAN-GUARD HALON FIRE EXTINGUISHER = RATED 1-A:10-B,C OR EQUIVALENT
- FA = FIRST AID STATION

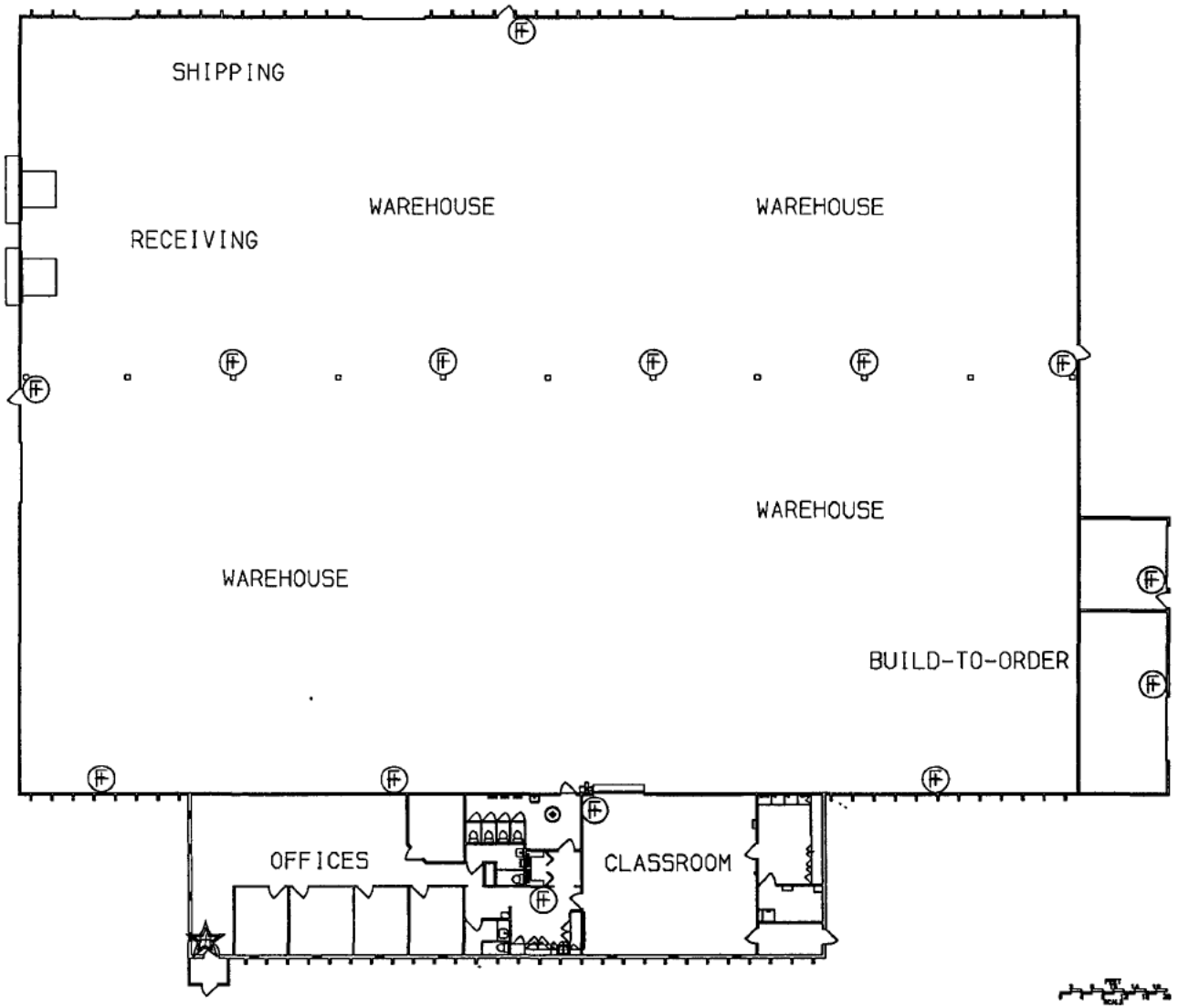


FIRE EXTINGUISHER LOCATIONS
EYE WASH LOCATIONS
FIRST AID STATION LOCATIONS

PLANT ONE
PLANT LAYOUT
FIREXTPLT1

EMERGENCY EQUIPMENT KEY

- ⊖ = EYE WASH STATIONS
- ⊙ = EYE WASH STATION WITH SHOWER
- ⓕ = 20# ABC DRY CHEMICAL FIRE EXTINGUISHER RATED 20-A: 120-B,C OR EQUIVALENT
- ★ = 10# HALON 1211 FIRE EXTINGUISHER RATED 1-A: 10-B,C OR EQUIVALENT
- ★ = 20# HALON 1211 FIRE EXTINGUISHER RATED 1-A: 10-B,C OR EQUIVALENT
- ◈ = 10# ABC DRY CHEMICAL FIRE EXTINGUISHER RATED 2-A: 10-B,C OR EQUIVALENT
- ⓒ = 10# CLEAN-GUARD HALON FIRE EXTINGUISHER RATED 1-A: 10-B,C OR EQUIVALENT
- FA = FIRST AID STATION



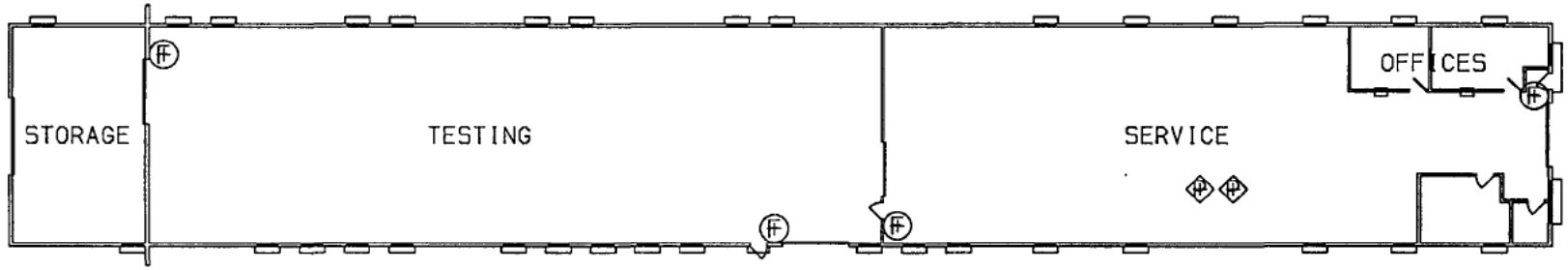
FIRE EXTINGUISHER LOCATIONS
EYE WASH LOCATIONS
FIRST AID STATION LOCATIONS

PLANT TWO
PLANT LAYOUT
FIREXTPLT2

EMERGENCY EQUIPMENT KEY

- ⊖ = EYE WASH STATIONS
- ⊙ = EYE WASH STATION WITH SHOWER
- Ⓕ = 20# ABC DRY CHEMICAL FIRE EXTINGUISHER RATED 20-A: 120-B,C OR EQUIVALENT
- ★ = 10# HALON 1211 FIRE EXTINGUISHER RATED 1-A: 10-B,C OR EQUIVALENT
- ★ = 20# HALON 1211 FIRE EXTINGUISHER RATED 1-A: 10-B,C OR EQUIVALENT
- ◈ = 10# ABC DRY CHEMICAL FIRE EXTINGUISHER RATED 2-A: 10-B,C OR EQUIVALENT
- Ⓒ = 10# CLEAN-GUARD HALON FIRE EXTINGUISHER RATED 1-A: 10-B,C OR EQUIVALENT
- FA = FIRST AID STATION

NORTH



FIRE EXTINGUISHER LOCATIONS
EYE WASH LOCATIONS
FIRST AID STATION LOCATIONS

PLANT THREE
PLANT LAYOUT
FIREXTPLT3

MANIFEST DOCUMENTS:

Samples

Appendix D

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name | 6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address | 10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

REC'D 2-3-98

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION 6-195
P.O. Box 13087
Austin, Texas 78711-3087

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form approved. OMB No. 2050-0039, expires 09/30/99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. KSD007237290 — Manifest Document No. 51412
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address EXCEL INDUSTRIES
PO BOX 7000
HESSTON KS 67062-2097
4. Generator's Phone (316 327-4911)

A. State Manifest Document Number SK 725677
B. State Generator's ID 99920

5. Transporter 1 Company Name SAFETY-KLEEN CORP. — 6. US EPA ID Number ILD 984906202
C. State Transporter's ID 40823
D. Transporter's Phone 316 942-5001

7. Transporter 2 Company Name — 8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address SAFETY-KLEEN CORP.
1722 COOPER CREEK ROAD
DENTON, TX 76208 — 10. US EPA ID Number TXD 077603371
G. State Facility ID 65124
H. Facility's Phone 940-383-2611

11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
X	a. RQ WASTE PAINT 3 UN1263 PG II (D001)(ERG #127)	012	DM	5335	P	DUTS209H
X	b. RQ WASTE PAINT RELATED MATERIAL 3 UN1263 PG II (F003)(ERG#127)	007	DM	3789	P	DUTS209H
	c.					
	d.					

J. Additional Descriptions for Materials Listed Above
1A: D001 ED; 2003; D001

K. Handling Codes for Wastes Listed Above
A M061
B M061

15. Special Handling Instructions and Additional Information MFST R/T# 94781396 6-195-01-8149
EMERGENCY RESP 800-468-1760(24 HR). IF UNDELIVERABLE RETURN TO GENERATOR.
SK CORP AUTH'D TO USE THESE SUBSEQUEN T CARRIERS: 81300, 40355, 41015, 40582
SKDOT# A: 1058 B: 1165 C: D:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the enyironment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
RICHARD W. BLOUIN	Richard W. Blouin	1	14	98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
M BRANSON	M Branson	01	14	98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Date: Month	Day	Year
K DAVIS	K Davis	01	22	98

6-195-41

PO 83585

REC'D 2-23-98

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSD 007237290
Manifest Document No.: 71258
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
EXCEL INDUSTRIES
PO BOX 7000 200 S RIDGE RD
HESSTON KS 67062
4. Generator's Phone (316) 327-4911

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN CORP.
6. US EPA ID Number: ILD 984908202
C. State Transporter's ID
D. Transporter's Phone: 316 942-5001

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: 619501
SAFETY-KLEEN CORP.
1311 S ANNA
WICHITA, KS 67209
10. US EPA ID Number: KSD 000809723
G. State Facility's ID
H. Facility's Phone: 316 942-5001

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	WASTE PAINT RELATED MATERIAL 3 UN1263 PG II(F005, F003, D001, D008, D018 D022, D028, D035, D039, D040) (ERG#127) 7.2#/G	X	1	DM	36	P	F005 F003
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
I(A) D001 D008
(A) D018 D022 D028 D035

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
IF UNDELIVERABLE, RETURN TO GENERATOR.
EMERGENCY RESP#800-468-1760 24HR.
9807 94872812 971258 6-195-41-2187 01

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name	Signature	Date (Month Day Year)
Leann McNulty	Leann McNulty	2 17 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Keith Hall		2 17 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Kelly Reeves	Kelly Reeves	2 18 98

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

A: 10077 B: C: D:

90290

6

HAZARDOUS WASTE

WEEKLY INSPECTION

Hazardous Waste
Weekly Inspection Sheet
Per KAR 28-31-4(k)

Date:___/___/___

Plant #1

Waste Paint (Air Dry or Baked Enamel Paint only) - Drums Qty (____)
Sample #125671, Control #0079323-1 (Lab.), Flammable Liquid
R.Q. Waste Paint Related Material (ERG #127)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Waste Thinner (D100 or D150 or Mineral Spirits) - Drums Qty (____)
Sample #394785, Control #2610014 Lab.), Flammable Liquid
R.Q. Waste Paint Related Material (ERG #127)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Waste MPK (Jello Type & Liquid Solvent) - Drums Qty (____)
Sample #1170553, Control #2713323 (Lab.), Flammable Liquid
R.Q. Waste paint (ERG #127)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Waste Antifreeze & Water - Drums Qty (____)
Sample #125670, Control #0079307-7 (Lab.)
R.Q. Hazardous Waste Liquid (ERG #171)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Waste Gasoline - Drums Qty (____)
Sample #125656, Control #0079291-2 (Lab.), Flammable Liquid
R.Q. Waste Gasoline ERG #128)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Waste Beta Seal - Drums Qty (____)
Sample #2020155, Control #1829506-9 (Lab.), Flammable Liquid
R.Q. Hazardous Waste, Solid, N.O.S. (ERG #171)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Waste Vanishing Oil - Drums Qty (____)
Sample #2020160, Control #1829508-4 (Lab.), Flammable Liquid
R.Q. Waste Flammable Liquid, N.O.S. (ERG #128)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Waste Insta Pak-Part B - Drums Qty (____)
Sample #2020161, Control #_____ (Lab.), Flammable Liquid
R.Q. _____ (ERG #___)
Leakers ( )Y( )N, on 2X4 ( )Y( )N, Labeled ( )Y( )N, Sealed ( )Y( )N

Used Oil - Non Hazardous - Bulk (1/4) (1/2) (3/4) (Full)
Sample #66661 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Leaks ( )Y( )N, Labeled ( )Y( )N, Locked ( )Y( )N

Used Coolant - Non Hazardous - Bulk (1/4) (1/2) (3/4) (Full)
Sample #66663 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Leaks ( )Y( )N, Labeled ( )Y( )N, Locked ( )Y( )N

Waste Ashes - Non Hazardous - Drums Qty (____)
Sample #_____
Labeled ( )Y( )N

Waste Urethane Paint Filter Media - Non Hazardous - Drums Qty (____)
Sample #_____
Labeled ( )Y( )N

Fluorescent Lamps

Full 4' Boxes (____) 39/Box
Full 8' Boxes (____) 39/Box

Used Tires

Small (____) Large (____)

Used Batteries

Car Batteries (____) Size (__ X __ X __)
Fork Lift Batteries (____) Size (__ X __ X __)

Signature _____

Revised 02/10/99

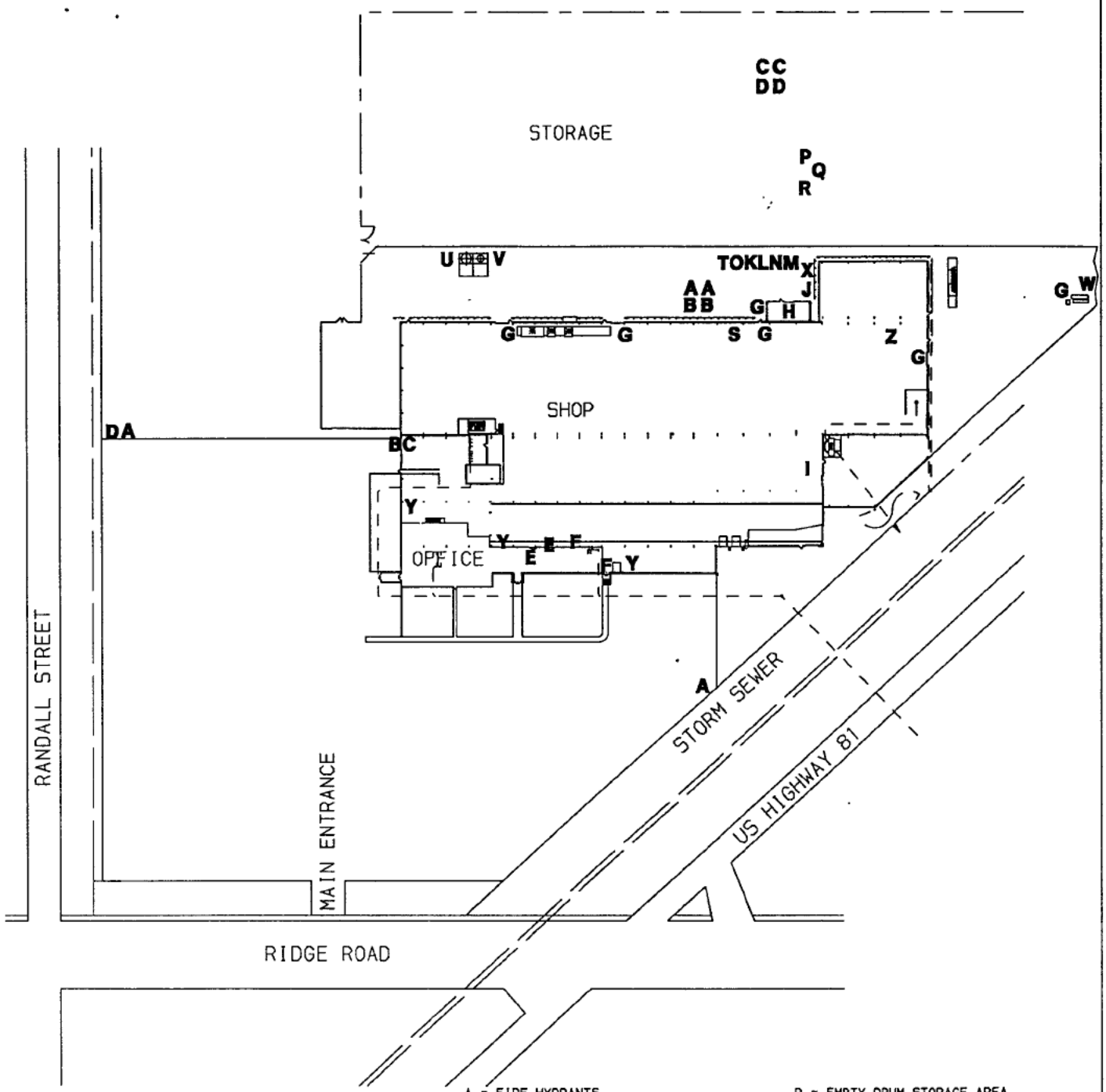
SITE PLAN

NORTH

SITE PLAN FOR EXCEL INDUSTRIES, INC.
HAZARDOUS CHEMICAL LOCATIONS

FACILITY-12

L. PETERS
OCTOBER 13, 1998



A = FIRE HYDRANTS
B = SPRINKLER SYSTEM "Y" CONNECTION
C = SPRINKLER SYSTEM RISER & CONTROLS
D = POST INDICATOR VALVE
E = FIRE ALARM PULL STATIONS
F = EMERGENCY TELEPHONE
G = FIRE EXTINGUISHERS
H = PAINT PUMP EQUIPMENT
I = BAKE-OFF OVEN
J = WASTE LIQUID PAINT
K = D150 THINNER BULK TANK
L = MPK BULK TANK
M = USED OIL BULK TANK
N = MINERAL SPIRITS DRUM
O = WASTE THINNER STORAGE AREA
P = EMPTY DRUM STORAGE AREA
Q = ASHES STORAGE AREA
R = SPENT FILTER MEDIA STORAGE
S = WATER/ANTIFREEZE BULK TANK
T = MOTOR OIL UNDERGROUND STORAGE TANK
U = ARGON BULK TANK
V = OXYGEN BULK TANK
W = PROPANE BULK TANK
X = WASTE MPK
Y = WASTE MINERAL SPIRITS
Z = WASTE COMBUSTIBLE LIQUID
AA = WASTE GASOLINE & WATER
BB = WASTE ANTIFREEZE & OIL
CC = USED BATTERIES
DD = USED TIRES

PLANT ONE
EXCEL INDUSTRIES, INC.
200 SOUTH RIDGE ROAD
HESSTON, KS 67062

APPENDIX A

F- LIST

K- LIST

P- LIST

U - LIST

Appendix A

Hazardous Wastes from Non-Specific Sources (F-List)

Industry and EPA Hazardous Waste Number	Hazardous Waste (Hazard Code)
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures (T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures (T)
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures (I)
F004	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures (T)
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures (I, T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum (T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum (T)
F007	Spent cyanide plating bath solutions from electroplating operations (R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process (R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process (R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (R, T)

Industry and EPA Hazardous Waste Number	Hazardous Waste (Hazard Code)
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process (T)
F024	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. [This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in §261.32.] (T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.) (H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives (H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions (H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.) (H)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution (T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions (H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene sythesized from prepurified 2,4,5-trichlorophenol as the sole component.) (H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027 (T)
F032	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use cresote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The listing for plants that have previously used chlorophenolic formulations is administratively stayed whenever these

Industry and EPA Hazardous Waste Number	Hazardous Waste (Hazard Code)

wastes are covered by the F034 or F035 listings. These stays will remain in effect until further administrative action is taken.) (T)

F034 ..... Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving process generated at plants that use cresote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use cresote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The stay will remain in effect until further administrative action is taken.) (T)

F035 ..... Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving process generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use cresote and/or pentachlorophenol. (Note: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. The stay will remain in effect until further administrative action is taken.) (T)

F037 ..... Petroleum refinery primary oil/water/solids separation sludge- Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing (T)

F038 ..... Petroleum refinery secondary (emulsified) oil/water/solids separation sludge- Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non- contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing (T)

F039 ..... Leachate (liquids that have percolated through land disposal wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028) (T)

* Hazard Codes

I	Ignitable Waste
W	Corrosive Waste
R	Reactive Waste
E	Toxicity Characteristic Waste
H	Acute Hazardous Waste
T	Toxic Waste

Hazardous Wastes from Specific Sources (K-List)

Industry and EPA Hazardous Waste Number	Hazardous Waste (Hazard Code)

Wood preservation:

K001 ..... Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol (T)

Inorganic pigments:

K002 ..... Wastewater treatment sludge from the production of chrome yellow and orange pigments (T)

K003 ..... Wastewater treatment sludge from the production of molybdate orange pigments (T)

K004 ..... Wastewater treatment sludge from the production of zinc yellow pigments (T)

K005 ..... Wastewater treatment sludge from the production of chrome green pigments (T)

K006 ..... Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated) (T)

K007 ..... Wastewater treatment sludge from the production of iron blue pigments (T)

K008 ..... Oven residue from the production of chrome oxide green pigments (T)

Organic chemicals:

K009 ..... Distillation bottoms from the production of acetaldehyde from ethylene (T)

K010 ..... Distillation side cuts from the production of acetaldehyde from ethylene (T)

K011 ..... Bottom stream from the wastewater stripper in the production of acrylonitrile (R, T)

K013 ..... Bottom stream from the acetonitrile column in the production of acrylonitrile (R, T)

K014 ..... Bottoms from the acetonitrile purification column in the production of acrylonitrile (T)

K015 ..... Still bottoms from the distillation of benzyl chloride (T)

K016 ..... Heavy ends or distillation residues from the production of carbon tetrachloride (T)

K017 ..... Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin (T)

K018 ..... Heavy ends from the fractionation column in ethyl chloride production (T)

K019 ..... Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production (T)

K020 ..... Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production (T)

K021 ..... Aqueous spent antimony catalyst waste from fluoromethanes production (T)

K022 ..... Distillation bottom tars from the production of phenol/acetone from cumene (T)

K023 ..... Distillation light ends from the production of phthalic anhydride from naphthalene (T)

K024 ..... Distillation bottoms from the production of phthalic anhydride from naphthalene (T)

K093 ..... Distillation light ends from the production of phthalic anhydride from ortho-xylene (T)

K094 ..... Distillation bottoms from the production of phthalic anhydride from ortho-xylene (T)

K025 ..... Distillation bottoms from the production of nitrobenzene by the nitration of benzene (T)

K026 ..... Stripping still tails from the production of methy ethyl pyridines (T)

K027 ..... Centrifuge and distillation residues from toluene diisocyanate production (R, T)

K028 ..... Spent catalyst from the hydrochlorinator reactor in the production 1,1,1-trichloroethane (T)

K029 ..... Waste from the product steam stripper in the production of 1,1,1-trichloroethane (T)

K095 ..... Distillation bottoms from the production of 1,1,1-trichloroethane (T)

K096 ..... Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane (T)

K030 ..... Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene (T)

K083 ..... Distillation bottoms from aniline production (T)

K103 ..... Process residues from aniline extraction from the production of aniline (T)

K104 ..... Combined wastewater streams generated from nitrobenzene/aniline production (T)

K085 ..... Distillation or fractionation column bottoms from the production of chlorobenzenes (T)

Industry and EPA Hazardous Waste Number	Hazardous Waste (Hazard Code)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes (T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines (C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides (I,T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides (T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines (T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene (C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene (T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene (T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene (T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene (T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine (T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene (T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene (T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene (T)
Inorganic chemicals:	
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used (T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production (T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production (T)
Pesticides:	
K031	By-product salts generated in the production of MSMA and cacodylic acid (T)
K032	Wastewater treatment sludge from the production of chlordane (T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane (T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane (T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane (T)
K035	Wastewater treatment sludges generated in the production of creosote (T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton (T)
K037	Wastewater treatment sludges from the production of disulfoton (T)
K038	Wastewater from the washing and stripping of phorate production (T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate (T)
K040	Wastewater treatment sludge from the production of phorate (T)

Industry and EPA Hazardous Waste Number	Hazardous Waste (Hazard Code)
K041	Wastewater treatment sludge from the production of toxaphene (T)
K098	Untreated process wastewater from the production of toxaphene (T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T (T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D (T)
K099	Untreated wastewater from the production of 2,4-D (T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt (T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts (C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts (T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts (T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide (C,T)
K132	Spent absorbent and wastewater treatment separator solids from the production of methyl bromide (T)
Explosives:	
K044	Wastewater treatment sludges from the manufacturing and processing of explosives (R)
K045	Spent carbon from the treatment of wastewater containing explosives (R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds (T)
K047	Pink/red water from TNT operations (R)
Petroleum refining:	
K048	Dissolved air flotation (DAF) float from the petroleum refining industry (T)
K049	Slop oil emulsion solids from the petroleum refining industry (T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry (T)
K051	API separator sludge from the petroleum refining industry (T)
K052	Tank bottoms (leaded) from the petroleum refining industry (T)
Iron and steel:	
K061	Emission control dust/sludge from the primary production of steel in electric furnaces (T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332) (C,T)
Primary copper:	
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production (T)
Primary lead:	
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities (T)

Primary zinc:

K066 ..... Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production (T)

Primary aluminum:

K088 ..... Spent potliners from primary aluminum reduction (T)

Ferroalloys:

K090 ..... Emission control dust or sludge from ferrochromiumsilicon production (T)

K091 ..... Emission control dust or sludge from ferrochromium production (T)

Secondary lead:

K069 ..... Emission control dust/sludge from secondary lead smelting (T)

K100 ..... Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting (T)

Veterinary pharmaceuticals:

K084 ..... Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds (T)

K101 ..... Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds (T)

K102 ..... Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds (T)

Ink formulation:

K086 ..... Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead (T)

Coking:

K060 ..... Ammonia still lime sludge from coking operations (T)

K087 ..... Decanter tank tar sludge from coking operations (T)

	Hazard Codes
I	Ignitable Waste
W	Corrosive Waste
R	Reactive Waste
E	Toxicity Characteristic Waste
H	Acute Hazardous Waste
T	Toxic Waste

Discarded Acutely Toxic Commercial Chemical Products, Off-Specification Species, Container Residues and Spills Thereof (P-List)

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
P023	107 - 20 - 0	Acetaldehyde, chloro-
P002	591 - 08 - 2	Acetamide, N-(aminothioxomethyl)-
P057	640 - 19 - 7	Acetamide, 2-fluoro-
P058	62 - 74 - 8	Acetic acid, fluoro-, sodium salt
P002	591 - 08 - 2	1-Acetyl-2-thiourea
P003	107 - 02 - 8	Acrolein
P070	116 - 06 - 3	Aldicarb
P004	309 - 00 - 2	Aldrin
P005	107 - 18 - 6	Allyl alcohol
P006	20859 - 73 - 8	Aluminum phosphide (R,T)
P007	2763 - 96 - 4	5-(Aminomethyl)-3-isoxazolol
P008	504 - 24 - 5	4-Aminopyridine
P009	131 - 74 - 8	Ammonium picrate (R)
P119	7803 - 55 - 6	Ammonium vanadate
P099	506 - 61 - 6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778 - 39 - 4	Arsenic acid H_3AsO_4
P012	1327 - 53 - 3	Arsenic oxide As_2O_3
P011	303 - 28 - 2	Arsenic oxide As_2O_5
P011	1303 - 28 - 2	Arsenic pentoxide
P012	1327 - 53 - 3	Arsenic trioxide
P038	692 - 42 - 2	Arsine, diethyl-
P036	696 - 28 - 6	Arsonous dichloride, phenyl-
P054	151 - 56 - 4	Aziridine
P067	75 - 55 - 8	Aziridine, 2-methyl-
P013	542 - 62 - 1	Barium cyanide
P024	106 - 47 - 8	Benzenamine, 4-chloro-
P077	100 - 01 - 6	Benzenamine, 4-nitro-
P028	100 - 44 - 7	Benzene, (chloromethyl)-
P042	51 - 43 - 4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122 - 09 - 8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108 - 98 - 5	Benzenethiol
P001	81 - 81 - 2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100 - 44 - 7	Benzyl chloride
P015	7440 - 41 - 7	Beryllium
P017	598 - 31 - 2	Bromoacetone
P018	357 - 57 - 3	Brucine
P045	39196 - 18 - 4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino)carbonyl] oxime
P021	592 - 01 - 8	Calcium cyanide
P021	592 - 01 - 8	Calcium cyanide $Ca(CN)_2$

P022	75 - 15 - 0	Carbon disulfide
P095	75 - 44 - 5	Carbonic dichloride
P023	107 - 20 - 0	Chloroacetaldehyde
P024	106 - 47 - 8	p-Chloroaniline
P026	5344 - 82 - 1	1-(o-Chlorophenyl)thiourea
P027	542 - 76 - 7	3-Chloropropionitrile
P029	544 - 92 - 3	Copper cyanide
P029	544 - 92 - 3	Copper cyanide Cu(CN)
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460 - 19 - 5	Cyanogen
P033	506 - 77 - 4	Cyanogen chloride
P033	506 - 77 - 4	Cyanogen chloride (CN)Cl
P034	131 - 89 - 5	2-Cyclohexyl-4,6-dinitrophenol
P016	542 - 88 - 1	Dichloromethyl ether
P036	696 - 28 - 6	Dichlorophenylarsine
P037	60 - 57 - 1	Dieldrin
P038	692 - 42 - 2	Diethylarsine
P041	311 - 45 - 5	Diethyl-p-nitrophenyl phosphate
P040	297 - 97 - 2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55 - 91 - 4	Diisopropylfluorophosphate (DFP)
P004	309 - 00 - 2	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10 -hexa-chloro-1,4,4a,5,8,8a,-hexahydro (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465 - 73 - 6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10 - -hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60 - 57 - 1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9 - hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)-
P051	72 - 20 - 8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-, &metabolites
P044	60 - 51 - 5	Dimethoate
P046	122 - 09 - 8	alpha,alpha-Dimethylphenethylamine
P047	534 - 52 - 1	4,6-Dinitro-o-cresol, & salts
P048	51 - 28 - 5	2,4-Dinitrophenol
P020	88 - 85 - 7	Dinoseb
P085	152 - 16 - 9	Diphosphoramide, octamethyl-
P111	107 - 49 - 3	Diphosphoric acid, tetraethyl ester
P039	298 - 04 - 4	Disulfoton
P049	541 - 53 - 7	Dithiobiuret

P050 ..... 115 - 29 - 7 ..... Endosulfan
P088 ..... 145 - 73 - 3 ..... Endothall
P051 ..... 72 - 20 - 8 ..... Endrin
P051 ..... 72 - 20 - 8 ..... Endrin, & metabolites
P042 ..... 51 - 43 - 4 ..... Epinephrine
P031 ..... 460 - 19 - 5 ..... Ethanedinitrile
P066 ..... 16752 - 77 - 5 ..... Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101 ..... 107 - 12 - 0 ..... Ethyl cyanide
P054 ..... 151 - 56 - 4 ..... Ethyleneimine
P097 ..... 52 - 85 - 7 ..... Famphur
P056 ..... 7782 - 41 - 4 ..... Fluorine
P057 ..... 640 - 19 - 7 ..... Fluoroacetamide
P058 ..... 62 - 74 - 8 ..... Fluoroacetic acid, sodium salt
P065 ..... 628 - 86 - 4 ..... Fulminic acid, mercury(2+) salt (R,T)
P059 ..... 76 - 44 - 8 ..... Heptachlor
P062 ..... 757 - 58 - 4 ..... Hexaethyl tetraphosphate
P116 ..... 79 - 19 - 6 ..... Hydrazinecarbothioamide
P068 ..... 60 - 34 - 4 ..... Hydrazine, methyl-
P063 ..... 74 - 90 - 8 ..... Hydrocyanic acid
P063 ..... 74 - 90 - 8 ..... Hydrogen cyanide
P096 ..... 7803 - 51 - 2 ..... Hydrogen phosphide
P060 ..... 465 - 73 - 6 ..... Isodrin
P007 ..... 2763 - 96 - 4 ..... 3(2H)-Isoxazolone, 5-(aminomethyl)-
P092 ..... 62 - 38 - 4 ..... Mercury, (acetato-O)phenyl-
P065 ..... 628 - 86 - 4 ..... Mercury fulminate (R,T)
P082 ..... 62 - 75 - 9 ..... Methanamine, N-methyl-N-nitroso-
P064 ..... 624 - 83 - 9 ..... Methane, isocyanato-
P016 ..... 542 - 88 - 1 ..... Methane, oxybis[chloro-
P112 ..... 509 - 14 - 8 ..... Methane, tetranitro- (R)
P118 ..... 75 - 70 - 7 ..... Methanethiol, trichloro-
P050 ..... 115 - 29 - 7 ..... 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059 ..... 76 - 44 - 8 ..... 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066 ..... 16752 - 77 - 5 ..... Methomyl
P068 ..... 60 - 34 - 4 ..... Methyl hydrazine
P064 ..... 624 - 83 - 9 ..... Methyl isocyanate
P069 ..... 75 - 86 - 5 ..... 2-Methyllactonitrile
P071 ..... 298 - 00 - 0 ..... Methyl parathion
P072 ..... 86 - 88 - 4 ..... alpha-Naphthylthiourea
P073 ..... 13463 - 39 - 3 ..... Nickel carbonyl
P073 ..... 13463 - 39 - 3 ..... Nickel carbonyl $Ni(CO)_4$, (T-4)-
P074 ..... 557 - 19 - 7 ..... Nickel cyanide

P074	557 - 19 - 7	Nickel cynaide $Ni(CN)_2$
P075	54 - 11 - 5	Nicotine, & salts
P076	10102 - 43 - 9	Nitric oxide
P077	100 - 01 - 6	p-Nitroaniline
P078	10102 - 44 - 0	Nitrogen dioxide
P076	10102 - 43 - 9	Nitrogen oxide NO
P078	10102 - 44 - 0	Nitrogen oxide NO_2
P081	55 - 63 - 0	Nitroglycerine (R)
P082	62 - 75 - 9	N-Nitrosodimethylamine
P084	4549 - 40 - 0	N-Nitrosomethylvinylamine
P085	152 - 16 - 9	Octamethylpyrophosphoramide
P087	20816 - 12 - 0	Osmium oxide OsO_4, (T-4)-
P087	20816 - 12 - 0	Osmium tetroxide
P088	145 - 73 - 3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	56 - 38 - 2	Parathion
P034	131 - 89 - 5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51 - 28 - 5	Phenol, 2,4-dinitro-
P047	534 - 52 - 1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88 - 85 - 7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131 - 74 - 8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62 - 38 - 4	Phenylmercury acetate
P093	103 - 85 - 5	Phenylthiourea
P094	298 - 02 - 2	Phorate
P095	75 - 44 - 5	Phosgene
P096	7803 - 51 - 2	Phosphine
P041	311 - 45 - 5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298 - 04 - 4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298 - 02 - 2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60 - 51 - 5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino) -2-oxoethyl] ester
P043	55 - 91 - 4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56 - 38 - 2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297 - 97 - 2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52 - 85 - 7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298 - 00 - 0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P110	78 - 00 - 2	Plumbane, tetraethyl-
P098	151 - 50 - 8	Potassium cyanide
P098	151 - 50 - 8	Potassium cyanide K(CN)
P099	506 - 61 - 6	Potassium silver cyanide
P070	116 - 06 - 3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107 - 12 - 0	Propanenitrile
P027	542 - 76 - 7	Propanenitrile, 3-chloro-

P069 ..... 75 - 86 - 5 ..... Propanenitrile, 2-hydroxy-2-methyl-
P081 ..... 55 - 63 - 0 ..... 1,2,3-Propanetriol, trinitrate (R)
P017 ..... 598 - 31 - 2 ..... 2-Propanone, 1-bromo-
P102 ..... 107 - 19 - 7 ..... Propargyl alcohol
P003 ..... 107 - 02 - 8 ..... 2-Propenal
P005 ..... 107 - 18 - 6 ..... 2-Propen-1-ol
P067 ..... 75 - 55 - 8 ..... 1,2-Propylenimine
P102 ..... 107 - 19 - 7 ..... 2-Propyn-1-ol
P008 ..... 504 - 24 - 5 ..... 4-Pyridinamine
P075 ..... 54 - 11 - 5 ..... Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P114 ..... 12039 - 52 - 0 ..... Selenious acid, dithallium(1+) salt
P103 ..... 630 - 10 - 4 ..... Selenourea
P104 ..... 506 - 64 - 9 ..... Silver cyanide
P104 ..... 506 - 64 - 9 ..... Silver cyanide Ag(CN)
P105 ..... 26628 - 22 - 8 ..... Sodium azide
P106 .....: 143 - 33 - 9 ..... Sodium cyanide
P106 ..... 143 - 33 - 9 ..... Sodium cyanide Na(CN)
P108 ..... 57 - 24 - 9 ..... Strychnidin-10-one, & salts
P018 ..... 357 - 57 - 3 ..... Strychnidin-10-one, 2,3-dimethoxy-
P108 ..... 57 - 24 - 9 ..... Strychnine, & salts
P115 ..... 7446 - 18 - 6 ..... Sulfuric acid, dithallium(1+) salt
P109 ..... 3689 - 24 - 5 ..... Tetraethyldithiopyrophosphate
P110 ..... 78 - 00 - 2 ..... Tetraethyl lead
P111 ..... 107 - 49 - 3 ..... Tetraethyl pyrophosphate
P112 ..... 509 - 14 - 8 ..... Tetranitromethane (R)
P062 ..... 757 - 58 - 4 ..... Tetraphosphoric acid, hexaethyl ester
P113 ..... 1314 - 32 - 5 ..... Thallic oxide
P113 ..... 1314 - 32 - 5 ..... Thallium oxide Tl_2O_3
P114 ..... 12039 - 52 - 0 ..... Thallium(I) selenite
P115 ..... 7446 - 18 - 6 ..... Thallium(I) sulfate
P109 ..... 3689 - 24 - 5 ..... Thiodiphosphoric acid, tetraethyl ester
P045 ..... 39196 - 18 - 4 ..... Thiofanox
P049 ..... 541 - 53 - 7 ..... Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014 ..... 108 - 98 - 5 ..... Thiophenol
P116 ..... 79 - 19 - 6 ..... Thiosemicarbazide
P026 ..... 5344 - 82 - 1 ..... Thiourea, (2-chlorophenyl)-
P072 ..... 86 - 88 - 4 ..... Thiourea, 1-naphthalenyl-
P093 ..... 103 - 85 - 5 ..... Thiourea, phenyl-
P123 ..... 8001 - 35 - 2 ..... Toxaphene
P118 ..... 75 - 70 - 7 ..... Trichloromethanethiol
P119 ..... 7803 - 55 - 6 ..... Vanadic acid, ammonium salt
P120 ..... 1314 - 62 - 1 ..... Vanadium oxide V_2O_5

P120 ..... 1314 - 62 - 1 ..... Vanadium pentoxide
P084 ..... 4549 - 40 - 0 ..... Vinylamine, N-methyl-N-nitroso-
P001 ..... 81 - 81 - 2 ..... Warfarin, & salts, when present at concentrations greater than 0.3%
P121 ..... 557 - 21 - 1 ..... Zinc cyanide
P121 ..... 557 - 21 - 1 ..... Zinc cyanide $Zn(CN)_2$
P122 ..... 1314 - 84 - 7 ..... Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)

* Hazard Codes

I Ignitable Waste

W Corrosive Waste

R Reactive Waste

E Toxicity Characteristic Waste

H Acute Hazardous Waste

T Toxic Waste

Discarded Commercial Chemical Products, Off-Specification Species, Container Residues and Spills Thereof (U-List)

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U001	75 - 07 - 0	Acetaldehyde (I)
U034	75 - 87 - 6	Acetaldehyde, trichloro-
U187	62 - 44 - 2	Acetamide, N-(4-ethoxyphenyl)-
U005	53 - 96 - 3	Acetamide, N-9H-fluoren-2-yl-
U240	94 - 75 - 7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141 - 78 - 6	Acetic acid ethyl ester (I)
U144	301 - 04 - 2	Acetic acid, lead(2+) salt
U214	563 - 68 - 8	Acetic acid, thallium(1+) salt
see F027.	93 - 76 - 5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67 - 64 - 1	Acetone (I)
U003	75 - 05 - 8	Acetonitrile (I,T)
U004	98 - 86 - 2	Acetophenone
U005	53 - 96 - 3	2-Acetylaminofluorene
U006	75 - 36 - 5	Acetyl chloride (C,R,T)
U007	79 - 06 - 1	Acrylamide
U008	79 - 10 - 7	Acrylic acid (I)
U009	107 - 13 - 1	Acrylonitrile
U011	61 - 82 - 5	Amitrole
U012	62 - 53 - 3	Aniline (I,T)
U136	75 - 60 - 5	Arsinic acid, dimethyl-
U014	492 - 80 - 8	Auramine
U015	115 - 02 - 6	Azaserine
U010	50 - 07 - 7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta, 8aalpha,8balpha)]-
U157	56 - 49 - 5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225 - 51 - 4	Benz[c]acridine
U017	98 - 87 - 3	Benzal chloride
U192	23950 - 58 - 5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56 - 55 - 3	Benz[a]anthracene
U094	57 - 97 - 6	Benz[a]anthracene, 7,12-dimethyl-
U012	62 - 53 - 3	Benzenamine (I,T)
U014	492 - 80 - 8	Benzenamine, 4,4¼-carbonimidoylbis[N,N-dimethyl-
U049	3165 - 93 - 3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60 - 11 - 7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95 - 53 - 4	Benzenamine, 2-methyl-
U353	106 - 49 - 0	Benzenamine, 4-methyl-
U158	101 - 14 - 4	Benzenamine, 4,4¼-methylenebis[2-chloro-
U222	636 - 21 - 5	Benzenamine, 2-methyl-, hydrochloride
U181	99 - 55 - 8	Benzenamine, 2-methyl-5-nitro-
U019	71 - 43 - 2	Benzene (I,T)

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U038	510 - 15 - 6	Benzeneaceticacid,4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-,ethyl ester
U030	101 - 55 - 3	Benzene, 1-bromo-4-phenoxy-
U035	305 - 03 - 3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108 - 90 - 7	Benzene, chloro-
U221	25376 - 45 - 8	Benzenediamine, ar-methyl-
U028	117 - 81 - 7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84 - 74 - 2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84 - 66 - 2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131 - 11 - 3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117 - 84 - 0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95 - 50 - 1	Benzene, 1,2-dichloro-
U071	541 - 73 - 1	Benzene, 1,3-dichloro-
U072	106 - 46 - 7	Benzene, 1,4-dichloro-
U060	72 - 54 - 8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98 - 87 - 3	Benzene, (dichloromethyl)-
U223	26471 - 62 - 5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330 - 20 - 7	Benzene, dimethyl- (I,T)
U201	108 - 46 - 3	1,3-Benzenediol
U127	118 - 74 - 1	Benzene, hexachloro-
U056	110 - 82 - 7	Benzene, hexahydro- (I)
U220	108 - 88 - 3	Benzene, methyl-
U105	121 - 14 - 2	Benzene, 1-methyl-2,4-dinitro-
U106	606 - 20 - 2	Benzene, 2-methyl-1,3-dinitro-
U055	98 - 82 - 8	Benzene, (1-methylethyl)- (I)
U169	98 - 95 - 3	Benzene, nitro-
U183	608 - 93 - 5	Benzene, pentachloro-
U185	82 - 68 - 8	Benzene, pentachloronitro-
U020	98 - 09 - 9	Benzenesulfonic acid chloride (C,R)
U020	98 - 09 - 9	Benzenesulfonyl chloride (C,R)
U207	95 - 94 - 3	Benzene, 1,2,4,5-tetrachloro-
U061	50 - 29 - 3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72 - 43 - 5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy-
U023	98 - 07 - 7	Benzene, (trichloromethyl)-
U234	99 - 35 - 4	Benzene, 1,3,5-trinitro-
U021	92 - 87 - 5	Benzidine
U202	81 - 07 - 2	1.2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U203	94 - 59 - 7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120 - 58 - 1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94 - 58 - 6	1,3-Benzodioxole, 5-propyl-
U064	189 - 55 - 9	Benzo[rst]pentaphene
U248	81 - 81 - 2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0. 3% or less
U022	50 - 32 - 8	Benzo[a]pyrene
U197	106 - 51 - 4	p-Benzoquinone
U023	98 - 07 - 7	Benzotrichloride (C,R,T)
U085	1464 - 53 - 5	2,2¼-Bioxirane

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U021	92 - 87 - 5	[1,1'-Biphenyl]-4,4'-diamine
U073	91 - 94 - 1	[1,1 P-Biphenyl]-4,4 P-diamine, 3,3 P-dichloro-
U091	119 - 90 - 4	[1,1 P-Biphenyl]-4,4 P-diamine, 3,3 P-dimethoxy-
U095	119 - 93 - 7	[1,1 P-Biphenyl]-4,4 P-diamine, 3,3 P-dimethyl-
U225	75 - 25 - 2	Bromoform
U030	101 - 55 - 3	4-Bromophenyl phenyl ether
U128	87 - 68 - 3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924 - 16 - 3	1-Butanamine, N-butyl-N-nitroso-
U031	71 - 36 - 3	1-Butanol (I)
U159	78 - 93 - 3	2-Butanone (I,T)
U160	1338 - 23 - 4	2-Butanone, peroxide (R,T)
U053	4170 - 30 - 3	2-Butenal
U074	764 - 41 - 0	2-Butene, 1,4-dichloro- (I,T)
U143	303 - 34 - 4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U031	71 - 36 - 3	n-Butyl alcohol (I)
U136	75 - 60 - 5	Cacodylic acid
U032	13765 - 19 - 0	Calcium chromate
U238	51 - 79 - 6	Carbamic acid, ethyl ester
U178	615 - 53 - 2	Carbamic acid, methylnitroso-, ethyl ester
U097	79 - 44 - 7	Carbamic chloride, dimethyl-
U114	111 - 54 - 6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U062	2303 - 16 - 4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U215	6533 - 73 - 9	Carbonic acid, dithallium(1+) salt
U033	353 - 50 - 4	Carbonic difluoride
U156	79 - 22 - 1	Carbonochloridic acid, methyl ester (I,T)
U033	353 - 50 - 4	Carbon oxyfluoride (R,T)
U211	56 - 23 - 5	Carbon tetrachloride
U034	75 - 87 - 6	Chloral
U035	305 - 03 - 3	Chlorambucil
U036	57 - 74 - 9	Chlordane, alpha & gamma isomers
U026	494 - 03 - 1	Chlornaphazin
U037	108 - 90 - 7	Chlorobenzene
U038	510 - 15 - 6	Chlorobenzilate
U039	59 - 50 - 7	p-Chloro-m-cresol
U042	110 - 75 - 8	2-Chloroethyl vinyl ether
U044	67 - 66 - 3	Chloroform
U046	107 - 30 - 2	Chloromethyl methyl ether
U047	91 - 58 - 7	beta-Chloronaphthalene
U048	95 - 57 - 8	o-Chlorophenol
U049	3165 - 93 - 3	4-Chloro-o-toluidine, hydrochloride
U032	13765 - 19 - 0	Chromic acid H2CrO4, calcium salt
U050	218 - 01 - 9	Chrysene
U051		Creosote
U052	1319 - 77 - 3	Cresol (Cresylic acid)

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U053	4170 - 30 - 3	Crotonaldehyde
U055	98 - 82 - 8	Cumene (I)
U246	506 - 68 - 3	Cyanogen bromide (CN)Br
U197	106 - 51 - 4	2,5-Cyclohexadiene-1,4-dione
U056	110 - 82 - 7	Cyclohexane (I)
U129	58 - 89 - 9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, 1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U057	108 - 94 - 1	Cyclohexanone (I)
U130	77 - 47 - 4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50 - 18 - 0	Cyclophosphamide
U240	94 - 75 - 7	2,4-D, salts & esters
U059	20830 - 81 - 3	Daunomycin
U060	72 - 54 - 8	DDD
U061	50 - 29 - 3	DDT
U062	2303 - 16 - 4	Diallate
U063	53 - 70 - 3	Dibenz[a,h]anthracene
U064	189 - 55 - 9	Dibenzo[a,i]pyrene
U066	96 - 12 - 8	1,2-Dibromo-3-chloropropane
U069	84 - 74 - 2	Dibutyl phthalate
U070	95 - 50 - 1	o-Dichlorobenzene
U071	541 - 73 - 1	m-Dichlorobenzene
U072	106 - 46 - 7	p-Dichlorobenzene
U073	91 - 94 - 1	3,3 P-Dichlorobenzidine
U074	764 - 41 - 0	1,4-Dichloro-2-butene (I,T)
U075	75 - 71 - 8	Dichlorodifluoromethane
U078	75 - 35 - 4	1,1-Dichloroethylene
U079	156 - 60 - 5	1,2-Dichloroethylene
U025	111 - 44 - 4	Dichloroethyl ether
U027	108 - 60 - 1	Dichloroisopropyl ether
U024	111 - 91 - 1	Dichloromethoxy ethane
U081	120 - 83 - 2	2,4-Dichlorophenol
U082	87 - 65 - 0	2,6-Dichlorophenol
U084	542 - 75 - 6	1,3-Dichloropropene
U085	1464 - 53 - 5	1,2:3,4-Diepoxybutane (I,T)
U108	123 - 91 - 1	1,4-Diethyleneoxide
U028	117 - 81 - 7	Diethylhexyl phthalate
U086	1615 - 80 - 1	N,N P-Diethylhydrazine
U087	3288 - 58 - 2	O,O-Diethyl S-methyl dithiophosphate
U088	84 - 66 - 2	Diethyl phthalate
U089	56 - 53 - 1	Diethylstilbesterol
U090	94 - 58 - 6	Dihydrosafrole
U091	119 - 90 - 4	3,3 P-Dimethoxybenzidine
U092	124 - 40 - 3	Dimethylamine (I)
U093	60 - 11 - 7	p-Dimethylaminoazobenzene
U094	57 - 97 - 6	7,12-Dimethylbenz[a]anthracene
U095	119 - 93 - 7	3,3 P-Dimethylbenzidine
U096	80 - 15 - 9	alpha,alpha-Dimethylbenzylhydroperoxide (R)

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U097	79 - 44 - 7	Dimethylcarbamoyl chloride
U098	57 - 14 - 7	1,1-Dimethylhydrazine
U099	540 - 73 - 8	1,2-Dimethylhydrazine
U101	105 - 67 - 9	2,4-Dimethylphenol
U102	131 - 11 - 3	Dimethyl phthalate
U103	77 - 78 - 1	Dimethyl sulfate
U105	121 - 14 - 2	2,4-Dinitrotoluene
U106	606 - 20 - 2	2,6-Dinitrotoluene
U107	117 - 84 - 0	Di-n-octyl phthalate
U108	123 - 91 - 1	1,4-Dioxane
U109	122 - 66 - 7	1,2-Diphenylhydrazine
U110	142 - 84 - 7	Dipropylamine (I)
U111	621 - 64 - 7	Di-n-propylnitrosamine
U041	106 - 89 - 8	Epichlorohydrin
U001	75 - 07 - 0	Ethanal (I)
U174	55 - 18 - 5	Ethanamine, N-ethyl-N-nitroso-
U155	91 - 80 - 5	1,2-Ethanediamine, N,N-dimethyl-N P-2-pyridinyl-N P-(2-thienylmethyl)-
U067	106 - 93 - 4	Ethane, 1,2-dibromo-
U076	75 - 34 - 3	Ethane, 1,1-dichloro-
U077	107 - 06 - 2	Ethane, 1,2-dichloro-
U131	67 - 72 - 1	Ethane, hexachloro-
U024	111 - 91 - 1	Ethane, 1,1 P-[methylenebis(oxy)] bis[2-chloro-
U117	60 - 29 - 7	Ethane, 1,1 P-oxybis-(I)
U025	111 - 44 - 4	Ethane, 1,1 P-oxybis[2-chloro-
U184	76 - 01 - 7	Ethane, pentachloro-
U208	630 - 20 - 6	Ethane, 1,1,1,2-tetrachloro-
U209	79 - 34 - 5	Ethane, 1,1,2,2-tetrachloro-
U218	62 - 55 - 5	Ethanethioamide
U226	71 - 55 - 6	Ethane, 1,1,1-trichloro-
U227	79 - 00 - 5	Ethane, 1,1,2-trichloro-
U359	110 - 80 - 5	Ethanol, 2-ethoxy-
U173	1116 - 54 - 7	Ethanol, 2,2 P-(nitrosoimino)bis-
U004	98 - 86 - 2	Ethanone, 1-phenyl-
U043	75 - 01 - 4	Ethene, chloro-
U042	110 - 75 - 8	Ethene, (2-chloroethoxy)-
U078	75 - 35 - 4	Ethene, 1,1-dichloro-
U079	156 - 60 - 5	Ethene, 1,2-dichloro-, (E)-
U210	127 - 18 - 4	Ethene, tetrachloro-
U228	79 - 01 - 6	Ethene, trichloro-
U112	141 - 78 - 6	Ethyl acetate (I)
U113	140 - 88 - 5	Ethyl acrylate (I)
U238	51 - 79 - 6	Ethyl carbamate (urethane)
U117	60 - 29 - 7	Ethyl ether (I)
U114	111 - 54 - 6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106 - 93 - 4	Ethylene dibromide

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U077	107 - 06 - 2	Ethylene dichloride
U359	110 - 80 - 5	Ethylene glycol monoethyl ether
U115	75 - 21 - 8	Ethylene oxide (I,T)
U116	96 - 45 - 7	Ethylenethiourea
U076	75 - 34 - 3	Ethylidene dichloride
U118	97 - 63 - 2	Ethyl methacrylate
U119	62 - 50 - 0	Ethyl methanesulfonate
U120	206 - 44 - 0	Fluoranthene
U122	50 - 00 - 0	Formaldehyde
U123	64 - 18 - 6	Formic acid (C,T)
U124	110 - 00 - 9	Furan (I)
U125	98 - 01 - 1	2-Furancarboxaldehyde (I)
U147	108 - 31 - 6	2,5-Furandione
U213	109 - 99 - 9	Furan, tetrahydro-(I)
U125	98 - 01 - 1	Furfural (I)
U124	110 - 00 - 9	Furfuran (I)
U206	18883 - 66 - 4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883 - 66 - 4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-
U126	765 - 34 - 4	Glycidylaldehyde
U163	70 - 25 - 7	Guanidine, N-methyl-N P-nitro-N-nitroso-
U127	118 - 74 - 1	Hexachlorobenzene
U128	87 - 68 - 3	Hexachlorobutadiene
U130	77 - 47 - 4	Hexachlorocyclopentadiene
U131	67 - 72 - 1	Hexachloroethane
U132	70 - 30 - 4	Hexachlorophene
U243	1888 - 71 - 7	Hexachloropropene
U133	302 - 01 - 2	Hydrazine (R,T)
U086	1615 - 80 - 1	Hydrazine, 1,2-diethyl-
U098	57 - 14 - 7	Hydrazine, 1,1-dimethyl-
U099	540 - 73 - 8	Hydrazine, 1,2-dimethyl-
U109	122 - 66 - 7	Hydrazine, 1,2-diphenyl-
U134	7664 - 39 - 3	Hydrofluoric acid (C,T)
U134	7664 - 39 - 3	Hydrogen fluoride (C,T)
U135	7783 - 06 - 4	Hydrogen sulfide
U135	7783 - 06 - 4	Hydrogen sulfide H2S
U096	80 - 15 - 9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96 - 45 - 7	2-Imidazolidinethione
U137	193 - 39 - 5	Indeno[1,2,3-cd]pyrene
U190	85 - 44 - 9	1,3-Isobenzofurandione
U140	78 - 83 - 1	Isobutyl alcohol (I,T)
U141	120 - 58 - 1	Isosafrole
U142	143 - 50 - 0	Kepone
U143	303 - 34 - 4	Lasiocarpine
U144	301 - 04 - 2	Lead acetate
U146	1335 - 32 - 6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446 - 27 - 7	Lead phosphate
U146	1335 - 32 - 6	Lead subacetate

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U129	58 - 89 - 9	Lindane
U163	70 - 25 - 7	MNNG
U147	108 - 31 - 6	Maleic anhydride
U148	123 - 33 - 1	Maleic hydrazide
U149	109 - 77 - 3	Malononitrile
U150	148 - 82 - 3	Melphalan
U151	7439 - 97 - 6	Mercury
U152	126 - 98 - 7	Methacrylonitrile (I, T)
U092	124 - 40 - 3	Methanamine, N-methyl- (I)
U029	74 - 83 - 9	Methane, bromo-
U045	74 - 87 - 3	Methane, chloro- (I, T)
U046	107 - 30 - 2	Methane, chloromethoxy-
U068	74 - 95 - 3	Methane, dibromo-
U080	75 - 09 - 2	Methane, dichloro-
U075	75 - 71 - 8	Methane, dichlorodifluoro-
U138	74 - 88 - 4	Methane, iodo-
U119	62 - 50 - 0	Methanesulfonic acid, ethyl ester
U211	56 - 23 - 5	Methane, tetrachloro-
U153	74 - 93 - 1	Methanethiol (I, T)
U225	75 - 25 - 2	Methane, tribromo-
U044	67 - 66 - 3	Methane, trichloro-
U121	75 - 69 - 4	Methane, trichlorofluoro-
U036	57 - 74 - 9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67 - 56 - 1	Methanol (I)
U155	91 - 80 - 5	Methapyrilene
U142	143 - 50 - 0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72 - 43 - 5	Methoxychlor
U154	67 - 56 - 1	Methyl alcohol (I)
U029	74 - 83 - 9	Methyl bromide
U186	504 - 60 - 9	1-Methylbutadiene (I)
U045	74 - 87 - 3	Methyl chloride (I,T)
U156	79 - 22 - 1	Methyl chlorocarbonate (I,T)
U226	71 - 55 - 6	Methyl chloroform
U157	56 - 49 - 5	3-Methylcholanthrene
U158	101 - 14 - 4	4,4 P-Methylenebis(2-chloroaniline)
U068	74 - 95 - 3	Methylene bromide
U080	75 - 09 - 2	Methylene chloride
U159	78 - 93 - 3	Methyl ethyl ketone (MEK) (I,T)
U160	1338 - 23 - 4	Methyl ethyl ketone peroxide (R,T)
U138	74 - 88 - 4	Methyl iodide
U161	108 - 10 - 1	Methyl isobutyl ketone (I)
U162	80 - 62 - 6	Methyl methacrylate (I,T)
U161	108 - 10 - 1	4-Methyl-2-pentanone (I)
U164	56 - 04 - 2	Methylthiouracil
U010	50 - 07 - 7	Mitomycin C

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U059	20830 - 81 - 3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy) -alpha-L-lyxo-hexopyranosyl)oxy] -7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134 - 32 - 7	1-Naphthalenamine
U168	91 - 59 - 8	2-Naphthalenamine
U026	494 - 03 - 1	Naphthalenamine, N,N P-bis(2-chloroethyl)-
U165	91 - 20 - 3	Naphthalene
U047	91 - 58 - 7	Naphthalene, 2-chloro-
U166	130 - 15 - 4	1,4-Naphthalenedione
U236	72 - 57 - 1	2,7-Naphthalenedisulfonic acid, 3,3 P-[(3,3 P- dimethyl[1,1 P-biphenyl]-4,4 P-diyl) bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U166	130 - 15 - 4	1,4-Naphthoquinone
U167	134 - 32 - 7	alpha-Naphthylamine
U168	91 - 59 - 8	beta-Naphthylamine
U217	10102 - 45 - 1	Nitric acid, thallium(1+) salt
U169	98 - 95 - 3	Nitrobenzene (I,T)
U170	100 - 02 - 7	p-Nitrophenol
U171	79 - 46 - 9	2-Nitropropane (I,T)
U172	924 - 16 - 3	N-Nitrosodi-n-butylamine
U173	1116 - 54 - 7	N-Nitrosodiethanolamine
U174	55 - 18 - 5	N-Nitrosodiethylamine
U176	759 - 73 - 9	N-Nitroso-N-ethylurea
U177	684 - 93 - 5	N-Nitroso-N-methylurea
U178	615 - 53 - 2	N-Nitroso-N-methylurethane
U179	100 - 75 - 4	N-Nitrosopiperidine
U180	930 - 55 - 2	N-Nitrosopyrrolidine
U181	99 - 55 - 8	5-Nitro-o-toluidine
U193	1120 - 71 - 4	1,2-Oxathiolane, 2,2-dioxide
U058	50 - 18 - 0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75 - 21 - 8	Oxirane (I,T)
U126	765 - 34 - 4	Oxiranecarboxyaldehyde
U041	106 - 89 - 8	Oxirane, (chloromethyl)-
U182	123 - 63 - 7	Paraldehyde
U183	608 - 93 - 5	Pentachlorobenzene
U184	76 - 01 - 7	Pentachloroethane
U185	82 - 68 - 8	Pentachloronitrobenzene (PCNB)
See F027.	87 - 86 - 5	Pentachlorophenol
U161	108 - 10 - 1	Pentanol, 4-methyl-
U186	504 - 60 - 9	1,3-Pentadiene (I)
U187	62 - 44 - 2	Phenacetin
U188	108 - 95 - 2	Phenol
U048	95 - 57 - 8	Phenol, 2-chloro-
U039	59 - 50 - 7	Phenol, 4-chloro-3-methyl-
U081	120 - 83 - 2	Phenol, 2,4-dichloro-
U082	87 - 65 - 0	Phenol, 2,6-dichloro-

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U089	56 - 53 - 1	Phenol, 4,4 P-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105 - 67 - 9	Phenol, 2,4-dimethyl-
U052	1319 - 77 - 3	Phenol, methyl-
U132	70 - 30 - 4	Phenol, 2,2 P-methylenebis[3,4,6-trichloro-
U170	100 - 02 - 7	Phenol, 4-nitro-
See F027.	87 - 86 - 5	Phenol, pentachloro-
See F027.	58 - 90 - 2	Phenol, 2,3,4,6-tetrachloro-
See F027.	95 - 95 - 4	Phenol, 2,4,5-trichloro-
See F027.	88 - 06 - 2	Phenol, 2,4,6-trichloro-
U150	148 - 82 - 3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446 - 27 - 7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288 - 58 - 2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314 - 80 - 3	Phosphorus sulfide (R)
U190	85 - 44 - 9	Phthalic anhydride
U191	109 - 06 - 8	2-Picoline
U179	100 - 75 - 4	Piperidine, 1-nitroso-
U192	23950 - 58 - 5	Pronamide
U194	107 - 10 - 8	1-Propanamine (I,T)
U111	621 - 64 - 7	1-Propanamine, N-nitroso-N-propyl-
U110	142 - 84 - 7	1-Propanamine, N-propyl- (I)
U066	96 - 12 - 8	Propane, 1,2-dibromo-3-chloro-
U083	78 - 87 - 5	Propane, 1,2-dichloro-
U149	109 - 77 - 3	Propanedinitrile
U171	79 - 46 - 9	Propane, 2-nitro- (I,T)
U027	108 - 60 - 1	Propane, 2,2 P-oxybis[2-chloro-
U193	1120 - 71 - 4	1,3-Propane sultone
See F027.	93 - 72 - 1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126 - 72 - 7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78 - 83 - 1	1-Propanol, 2-methyl- (I,T)
U002	67 - 64 - 1	2-Propanone (I)
U007	79 - 06 - 1	2-Propenamide
U084	542 - 75 - 6	1-Propene, 1,3-dichloro-
U243	1888 - 71 - 7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107 - 13 - 1	2-Propenenitrile
U152	126 - 98 - 7	2-Propenenitrile, 2-methyl- (I,T)
U008	79 - 10 - 7	2-Propenoic acid (I)
U113	140 - 88 - 5	2-Propenoic acid, ethyl ester (I)
U118	97 - 63 - 2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80 - 62 - 6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U194	107 - 10 - 8	n-Propylamine (I,T)
U083	78 - 87 - 5	Propylene dichloride
U148	123 - 33 - 1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110 - 86 - 1	Pyridine
U191	109 - 06 - 8	Pyridine, 2-methyl-
U237	66 - 75 - 1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56 - 04 - 2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930 - 55 - 2	Pyrrolidine, 1-nitroso-

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U200	50 - 55 - 5	Reserpine
U201	108 - 46 - 3	Resorcinol
U202	81 - 07 - 2	Saccharin, & salts
U203	94 - 59 - 7	Safrole
U204	7783 - 00 - 8	Selenious acid
U204	7783 - 00 - 8	Selenium dioxide
U205	7488 - 56 - 4	Selenium sulfide
U205	7488 - 56 - 4	Selenium sulfide SeS2 (R,T)
U015	115 - 02 - 6	L-Serine, diazoacetate (ester)
See F027.	93 - 72 - 1	Silvex (2,4,5-TP)
U206	18883 - 66 - 4	Streptozotocin
U103	77 - 78 - 1	Sulfuric acid, dimethyl ester
U189	1314 - 80 - 3	Sulfur phosphide (R)
See F027.	93 - 76 - 5	2,4,5-T
U207	95 - 94 - 3	1,2,4,5-Tetrachlorobenzene
U208	630 - 20 - 6	1,1,1,2-Tetrachloroethane
U209	79 - 34 - 5	1,1,2,2-Tetrachloroethane
U210	127 - 18 - 4	Tetrachloroethylene
See F027.	58 - 90 - 2	2,3,4,6-Tetrachlorophenol
U213	109 - 99 - 9	Tetrahydrofuran (I)
U214	563 - 68 - 8	Thallium(I) acetate
U215	6533 - 73 - 9	Thallium(I) carbonate
U216	7791 - 12 - 0	Thallium(I) chloride
U216	7791 - 12 - 0	Thallium chloride Tlcl
U217	10102 - 45 - 1	Thallium(I) nitrate
U218	62 - 55 - 5	Thioacetamide
U153	74 - 93 - 1	Thiomethanol (I,T)
U244	137 - 26 - 8	Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl-
U219	62 - 56 - 6	Thiourea
U244	137 - 26 - 8	Thiram
U220	108 - 88 - 3	Toluene
U221	25376 - 45 - 8	Toluenediamine
U223	26471 - 62 - 5	Toluene diisocyanate (R,T)
U328	95 - 53 - 4	o-Toluidine
U353	106 - 49 - 0	p-Toluidine
U222	636 - 21 - 5	o-Toluidine hydrochloride
U011	61 - 82 - 5	1H-1,2,4-Triazol-3-amine
U227	79 - 00 - 5	1,1,2-Trichloroethane
U228	79 - 01 - 6	Trichloroethylene
U121	75 - 69 - 4	Trichloromonofluoromethane
See F027.	95 - 95 - 4	2,4,5-Trichlorophenol
See F027.	88 - 06 - 2	2,4,6-Trichlorophenol
U234	99 - 35 - 4	1,3,5-Trinitrobenzene (R,T)
U182	123 - 63 - 7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126 - 72 - 7	Tris(2,3-dibromopropyl) phosphate
U236	72 - 57 - 1	Trypan blue
U237	66 - 75 - 1	Uracil mustard

Hazardous Waste Number	Chemical Abstract Number	Substance (Hazard Code*)
U176	759 - 73 - 9	Urea, N-ethyl-N-nitroso-
U177	684 - 93 - 5	Urea, N-methyl-N-nitroso-
U043	75 - 01 - 4	Vinyl chloride
U248	81 - 81 - 2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330 - 20 - 7	Xylene (I)
U200	50 - 55 - 5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314 - 84 - 7	Zinc phosphide Zn3P2, when present at concentrations of 10% or less

* Hazard Codes

I Ignitable Waste

W Corrosive Waste

R Reactive Waste

E Toxicity Characteristic Waste

H Acute Hazardous Waste

T Toxic Waste

APPENDIX B

LAND BAN CONCENTRATIONS

Appendix B

Land Ban Concentration Tables

Table CCWE -- Constituent Concentrations in Waste Extract

F001 — F005 spent solvents (in mg/l)

	Wastewater	All Other
Acetone	0.05	0.59
n-Butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	0.05	0.96
Chlorobenzene	0.15	.05
Cresols (and cresylic acid)	2.82	0.75
Cyclohexanone	0.125	0.75
1,2-Dichlorobenzene	0.65	0.125
Ethyl acetate	0.05	0.75
Ethylbenzene	0.05	0.053
Ethyl ether	0.05	0.75
Isobutanol	5.0	5.0
Methanol	0.25	0.75
Methylene chloride	0.20	0.96
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	0.33
Nitrobenzene	0.66	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.079	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.41
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.05	0.96
Trichloroethylene	0.062	0.091
Trichlorofluoromethane	0.05	0.96
Xylene	0.05	0.15

F007, F008, and F009 nonwastewaters (see also table CCW in §268.43) Concentration (in mg/l)

Cadmium	0.066
Chromium (total)	5.2
Lead	0.51
Nickel	0.32
Silver	0.072

F011 and F012 nonwastewaters (see also table CCW in §268.43) Concentration (in mg/l)

Cadmium	0.066
Chromium (total)	5.2
Lead	0.51
Nickel	0.32
Silver	0.072

Table CCW — Constituent Concentrations in Wastes

F001, F002, F003, F004 and F005 wastewaters (Pharmaceutical Industry) Concentration (in mg/1)

Methylene chloride	0.44

F006 nonwastewaters (see also Table CCWE in §268.41) Concentration (in mg/kg)

Cyanides (Total)	590
Cyanides (Amenable)	30

F007, F008, and F009 nonwastewaters (see also Table CCWE in §268.41) Concentration (in mg/kg)

Cyanides (Total)	590
Cyanides (Amenable)	30

F007, F008, and F009 wastewaters (see also Table CCWE in §268.41) Concentration (in mg/l)

Cyanides (Total)	1.9
Cyanides (Amenable)	0.10
Chromium (Total)	0.32
Lead	0.04
Nickel	0.44

F010 nonwastewaters Concentration (in mg/kg)

Cyanides (Total)	1.5

F010 wastewaters Concentration (in mg/l)

Cyanides (Total)	1.9
Cyanides (Amenable)	10

F011 and F012 nonwastewaters Concentration (in mg/kg)

Cyanides (Total)	110
Cyanides (Amenable)	9.1

F011 and F012 wastewaters (see also Table CCWE in §268.41) Concentration (in mg/l)

Cyanides (Total)	1.9
Cyanides (Amenable)	0.10
Chromium (Total)	0.32
Lead	0.04
Nickel	0.44

How to OBTAIN A MSDS

MEMO

May 6, 1998

To: All Excel Employees

From: L. Peters

Subject: How to Obtain a MSDS

According to Excel Industries, Inc. Hazardous Communication Program, all employees are provided the oportunity to obtain a Material Safety Data Sheet (MSDS) on any product upon request.

To obtain a MSDS you only need to contact your Supervisor, locate the Master MSDS file, & fill out a request form. The master MSDS file is kept in the hallway next to the offices of the Facilities Manager, the Maintenance Supervisor, & the Personnel Manager. Request forms are located in the lexan tray above the file drawer. Fill out the request as shown in the sample, your Supervisor will locate the MSDS & photocopy the MSDS & foreward your request to Personnel. All master MSDS' must stay in the master file.

Should you have any further questions or need assistance during or after hours you may contact one of the following:

Ex. 6 PII

Lelyn Peters, ext. 211, [redacted]
Richard Blouin, ext. 181, [redacted]
Ron Ratzlaff, ext. 129, [redacted]